ANNUAL INDEX

VOLUME 13

1978

AUTHORS

A

Abraham, S. See G.A. Rao
Ackman, R.G. See C. Litchfield
—— See P. Mayzaud
Adamson, A.W. See V. Slawson
Aeberhard, E.E., L. Corbo, and J.H. Menkes. *Polyenoic acid metabolism in cultured human skin fibroblasts,* 758
Ahluwalia, P. See M.K.P. Amma
Akamatsu, Y. See A. Tokumura
Åkesson, B., S. Gronowitz, B. Herslof, and R. Ohlson. *Absorption of synthetic, stereochemically defined acylglycerols* in the rat, 338
Albers, John J., G. Russell Warnick, and M.C. Cheung. *Quantitation of high density lipoproteins,* 926
Alexander, J.C. See H.G. Gabriel
—— See R.P. Bird
Aloyo, V.J. See R.M. Arneson
Amma, M.K.P., H.M. Dani, P. Ahluwalia, A. Dhingra, J. Kaur, S. Sharma, K. Jain, S. Singh, and K. Sareen. Communications re *1,2-propanediol-induced changes in plasma and tissue lipids of rats,* 455
Anderson, R. See M. Kates
Appelqvist, L.-Å. See A. Johansson
Arneson, R.M., and J.D. Wander. *Antioxidants in neoplastic cells: II. Isolation and partial characterization of a phenolic antioxidant from differentiated mouse neuroblastoma cells,* 391
—— V.J. Aloyo, G.S. Germain, and J.E. Chenevey. *Antioxidants in neoplastic cells: I. Changes in the antioxidative capacity of mouse neuroblastoma cells measured by a single-phase assay,* 383
Ashes, J.R. See S.K. Gulati
Askins, S.E. See J.I. Rabinowitz
Awad, Atif B. *The effect of elaidic acid incorporation upon the lipid composition of ehrlich ascites tumor cells and of the host's liver,* 850
Ayengar, N.K.N. See L.J. Tirri

B

Babcock, R. See J. Tinoco
Bailey, Alberta. See Gustav Schonfeld
Baker, Nome. See Ramaswamy Kannan
Balasingam, M. See E.W. Dunham
Bankoski, Joyce. See P.P. Nair
Barakat, H.A., W.E. Brown, and S. Debnath. Communications re *stearoyl-CoA desaturase activity in adipose tissue and liver of the cardiomyopathic hamster,* 622
Bard, M., K.J. Wilson, and R.M. Thompson. *Isolation of sterol mutants in Chlamydomonas reinhardi: Chromatographic analyses,* 533
Batta, A.K. See N. Hoshita
Baumann, W.J. See S. Parthasarathy
Beare-Rogers, J.L. See C.M. Marchand
Belfrage, P. See P. Nilsson-Ehle
Bell, A.W. See R.C. Noble
Bell, F.P., C.S. Patt, and P.J. Gillies. *Effect of phthalate esters on serum cholesterol and lipid biosynthesis in liver, testes, and epididymal fat in the rat and rabbit,* 673
—— C.S. Patt, B. Brundege, P.J. Gillies, and W.A. Phillips. *Studies on lipid biosynthesis and cholesterol content of liver and serum lipoproteins in rats fed various phthalate esters,* 66
—— See H.C. Klauda
Bennett, J.P. See G.A. Smith
Bhattacharyya, D.K. See S.K. Das
Bird, R.P. and J.C. Alexander. *Uptake and utilization of 1-^{14}C palmitic acid by heart cells treated with fresh or thermally oxidized fats,* 809
Bittman, R. *Sterol-polyene antibiotic complexation: Probe of membranes structure,* 686
Björksten, J. See F. Sundholm
Blanche, P.J. See A.V. Nichols
Blomstrand, R., L. Svensson, and B. Herslöf. Methods re *mass fragmentographic determination of docosenoic acid in rapeseed oils,* 283
Blomquist, G.J. See M.A. Major
Boere, W.A.M. See A. Montfoort
Bohannon, M.B. and R. Kleiman. *Cycloprene fatty acids of selected seed oils from bombacaceae, malvaceae, and sterculiaceae,* 270
Borgström, B. *Equilibrium of taurodeoxycholate between mixed micellar and aqueous phases: Effect of amphiphile,* 187
Bories, G.F. See J.E. Tulliez
Borrebaek, B. See R.Z. Christiansen
Bottino, N.R. *Lipids of the antarctic Sei whale, Balaenoptera borealis,* 18
Boucrot, P., D. Reisser, and J. Clement. *The behavior of rat bile phospholipids in the intestine and in incubation media containing pancreatic juice,* 791
—— See D. Reisser
Bowers, W.S. *Insect juvenile hormones and pheromones of isopentenoid biogenesis,* 736
Brady, D.W. See M.L. Kashyap
Branwood, A.W. *The development of coronary thrombosis following myocardial infarction,* 378
Bremer, J. See R.Z. Christiansen
Brenner, R.R. See I.N.T. deGómez Dumm
Brockerhoff, H. See L.J. Tirri
Brown, W.E. See H.A. Barakat
Brundage, B. See F.P. Bell
Budowski, P. See D. Sklan
Burns, C.P., S.-P.L. Wei, and A.A. Spector. *Fatty acid metabolism in L1210 murine leukemia cells: Differences in modification of fatty acids incorporated into various lipids,* 666
Bushway, A.A. and T.W. Kennan. *Composition and synthesis of three higher ganglioside homologs in bovine mammary tissue,* 59

C

Cady, R.K. See S. Parthasarathy
Carlstrom, S. See P. Nilsson-Ehle
Carroll, K.K. *The role of dietary protein in hypercholesterolemia and atherosclerosis,* 360
—— See C.A. Rupar
Carpenter, M.P., R.D. Robinson, and L.P. Thuy. Communication re *prostaglandin metabolism by human testis,* 308
Chang, C., R.L. Pike, and C.O. Clagett. *Progressive gross changes in renal medullary composition in pregnant rats,* 167
Chang, S.C.S. See J.K. Yao
Chapman, C.J. See A.J. Valicenti
Chatterjie. N. See L.J. Tirri
Chen, H.W. See A.A. Kandutsch
Chenevev, J.E. See R.M. Arneson
Cheng, F.W. See N. Hoshita
Cheung. M.C. See John J. Albers
Chevallier, F. See J.C. Sulpice
Chipault. J.R. See A.J. Valicenti
Chow, S.L. and D. Hollander. *Arachidonic acid intestinal absorption: Mechanism of transport and influence of luminal factors on absorption in vitro,* 768
Chow, S.-L. and D. Hollander. *Initial cholesterol uptake by everted sacs of rat small intestine: Kinetic and thermodynamic aspects,* 239
Christiansen, R.Z., H. Osmundsen, B. Borrebaek, and J. Bremer. *The effects of clofibrate feeding on the metabolism of palmitate and erucate in isolated hepatocytes.* 487
Chumbler, F. See R. Wood
Clagett, C.O. See C. Chang
Clarkson, T.B. See J.E. Macnintch

ANNUAL INDEX

VOLUME 13

1978

AUTHORS

A

Abraham, S. See G.A. Rao
Ackman, R.G. See C. Litchfield
—— See P. Mayzaud
Adamson, A.W. See V. Slawson
Aeberhard, E.E., L. Corbo, and J.H. Menkes. *Polyenoic acid metabolism in cultured human skin fibroblasts,* 758
Ahluwalia, P. See M.K.P. Amma
Akamatsu, Y. See A. Tokumura
Åkesson, B., S. Gronowitz, B. Herslof, and R. Ohlson. *Absorption of synthetic, stereochemically defined acylglycerols* in the rat, 338
Albers, John J., G. Russell Warnick, and M.C. Cheung. *Quantitation of high density lipoproteins,* 926
Alexander, J.C. See H.G. Gabriel
—— See R.P. Bird
Aloyo, V.J. See R.M. Arneson
Amma, M.K.P., H.M. Dani, P. Ahluwalia, A. Dhingra, J. Kaur, S. Sharma, K. Jain, S. Singh, and K. Sareen. Communications re *1,2-propanediol-induced changes in plasma and tissue lipids of rats,* 455
Anderson, R. See M. Kates
Appelqvist, L.-Å. See A. Johansson
Arneson, R.M., and J.D. Wander. *Antioxidants in neoplastic cells: II. Isolation and partial characterization of a phenolic antioxidant from differentiated mouse neuroblastoma cells,* 391
—— V.J. Aloyo, G.S. Germain, and J.E. Chenevey. *Antioxidants in neoplastic cells: I. Changes in the antioxidative capacity of mouse neuroblastoma cells measured by a single-phase assay,* 383
Ashes, J.R. See S.K. Gulati
Askins, S.E. See J.I. Rabinowitz
Awad, Atif B. *The effect of elaidic acid incorporation upon the lipid composition of ehrlich ascites tumor cells and of the host's liver,* 850
Ayengar, N.K.N. See L.J. Tirri

B

Babcock, R. See J. Tinoco
Bailey, Alberta. See Gustav Schonfeld
Baker, Nome. See Ramaswamy Kannan
Balasingam, M. See E.W. Dunham
Bankoski, Joyce. See P.P. Nair
Barakat, H.A., W.E. Brown, and S. Debnath. Communications re *stearoyl-CoA desaturase activity in adipose tissue and liver of the cardiomyopathic hamster,* 622
Bard, M., K.J. Wilson, and R.M. Thompson. *Isolation of sterol mutants in Chlamydomonas reinhardi: Chromatographic analyses,* 533
Batta, A.K. See N. Hoshita
Baumann, W.J. See S. Parthasarathy
Beare-Rogers, J.L. See C.M. Marchand
Belfrage, P. See P. Nilsson-Ehle
Bell, A.W. See R.C. Noble
Bell, F.P., C.S. Patt, and P.J. Gillies. *Effect of phthalate esters on serum cholesterol and lipid biosynthesis in liver, testes, and epididymal fat in the rat and rabbit,* 673
—— C.S. Patt, B. Brundege, P.J. Gillies, and W.A. Phillips. *Studies on lipid biosynthesis and cholesterol content of liver and serum lipoproteins in rats fed various phthalate esters,* 66
—— See H.C. Klauda
Bennett, J.P. See G.A. Smith
Bhattacharyya, D.K. See S.K. Das
Bird, R.P. and J.C. Alexander. *Uptake and utilization of 1-^{14}C palmitic acid by heart cells treated with fresh or thermally oxidized fats,* 809
Bittman, R. *Sterol-polyene antibiotic complexation: Probe of membranes structure,* 686
Björksten, J. See F. Sundholm
Blanche, P.J. See A.V. Nichols
Blomstrand, R., L. Svensson, and B. Herslöf. Methods re *mass fragmentographic determination of docosenoic acid in rapeseed oils,* 283
Blomquist, G.J. See M.A. Major
Boere, W.A.M. See A. Montfoort
Bohannon, M.B. and R. Kleiman. *Cycloprene fatty acids of selected seed oils from bombacaceae, malvaceae, and sterculiaceae,* 270
Borgström, B. *Equilibrium of taurodeoxycholate between mixed micellar and aqueous phases: Effect of amphiphile,* 187
Bories, G.F. See J.E. Tulliez
Borrebaek, B. See R.Z. Christiansen
Bottino, N.R. *Lipids of the antarctic Sei whale, Balaenoptera borealis,* 18
Boucrot, P., D. Reisser, and J. Clement. *The behavior of rat bile phospholipids in the intestine and in incubation media containing pancreatic juice,* 791
—— See D. Reisser
Bowers, W.S. *Insect juvenile hormones and pheromones of isopentenoid biogenesis,* 736
Brady, D.W. See M.L. Kashyap
Branwood, A.W. *The development of coronary thrombosis following myocardial infarction,* 378
Bremer, J. See R.Z. Christiansen
Brenner, R.R. See I.N.T. deGómez Dumm
Brockerhoff, H. See L.J. Tirri
Brown, W.E. See H.A. Barakat
Brundage, B. See F.P. Bell
Budowski, P. See D. Sklan
Burns, C.P., S.-P.L. Wei, and A.A. Spector. *Fatty acid metabolism in L1210 murine leukemia cells: Differences in modification of fatty acids incorporated into various lipids,* 666
Bushway, A.A. and T.W. Kennan. *Composition and synthesis of three higher ganglioside homologs in bovine mammary tissue,* 59

C

Cady, R.K. See S. Parthasarathy
Carlstrom, S. See P. Nilsson-Ehle
Carroll, K.K. *The role of dietary protein in hypercholesterolemia and atherosclerosis,* 360
—— See C.A. Rupar
Carpenter, M.P., R.D. Robinson, and L.P. Thuy. Communication re *prostaglandin metabolism by human testis,* 308
Chang, C., R.L. Pike, and C.O. Clagett. *Progressive gross changes in renal medullary composition in pregnant rats,* 167
Chang, S.C.S. See J.K. Yao
Chapman, C.J. See A.J. Valicenti
Chatterjie. N. See L.J. Tirri
Chen, H.W. See A.A. Kandutsch
Chenevev, J.E. See R.M. Arneson
Cheng, F.W. See N. Hoshita
Cheung. M.C. See John J. Albers
Chevallier, F. See J.C. Sulpice
Chipault. J.R. See A.J. Valicenti
Chow, S.L. and D. Hollander. *Arachidonic acid intestinal absorption: Mechanism of transport and influence of luminal factors on absorption in vitro,* 768
Chow, S.-L. and D. Hollander. *Initial cholesterol uptake by everted sacs of rat small intestine: Kinetic and thermodynamic aspects,* 239
Christiansen, R.Z., H. Osmundsen, B. Borrebaek, and J. Bremer. *The effects of clofibrate feeding on the metabolism of palmitate and erucate in isolated hepatocytes.* 487
Chumbler, F. See R. Wood
Clagett, C.O. See C. Chang
Clarkson, T.B. See J.E. Macnintch

Clement, J. See P. Boucrot
Cmelik, S.H.W. and H. Ley. *Neutral lipids from the temporal gland of the african elephant, Loxodonta africana,* 195
Cohen, B.I. See R.F. Raicht
Colgan, R. See W.L. Porter
Conner, R.L., J.R. Landrey, J.M. Joseph, and W.R. Nes. *The steric requirements for sterol inhibition of tetrahymanol biosynthesis,* 692
Cook, L.J. See S.K. Gulati
Corbo, L. See E.E. Aeberhard
Crawford, M.A. See A.G. Hassam

D

Dani, H.M. See M.K.P. Amma
Darnerud, P.O., M. Olsen, and B. Wahlström. *Effects of cold stress on rats fed different levels of docosenoic acids,* 459
Das, S.K., M.E. Steen, M.S. McCullough, and D.K. Bhattacharyya. *Composition of lipids of bovine optic nerve,* 679
Davis, J. Wendell and William H. Elliott. *Bile acids LVIII. Bile acids and colorectal cancer,* 976
Dayal, B. See N. Hoshita
deAlaniz, M.J.T. See I.N.T. deGómez Dumm
Debnath, S. See H.A. Barakat
deGómenz Dumm, I.N.T., M.J.T. deAlaniz, and R.R. Brenner. *Effect of catecholamines and β-blockers on linoleic acid desaturation activity,* 649
de la Roche, A.I. See A.C. Wilson
de Oliveira Filgueiras, O.M., A.M.H.P. van den Besselaar, and H. van den Bosch. *Availability of lysophosphatidylcholine in single bilayer vesicles for hydrolysis by lysophospholipase,* 898
De Tomas, M.E. See O. Mercuri
Dewailly, P., A. Nouvelot, G. Sezille, J.C. Fruchart, and J. Jaillard. Communication re *changes in fatty acid composition of cardiac mitochondrial phospholipids in rats fed rapeseed oil,* 301
De Wolf, M., A. Lagrou, H.J. Hilderson, and W. Dierick. *Acid triacylglycerol lipase from bovine thyroid gland,* 598
Dhingra, A. See M.K.P. Amma
Dierick, W. See M. De Wolf
Dillard, C.J., R.E. Litov, and A.L. Tappel. *Effects of dietary vitamin E, selenium, and polyunsaturated fats on in vivo lipid peroxidation in the rat as measured by pentane production,* 396
Domingo, N. See D. Lairon
Dousset, N. See M.L. Solera
Douste-Blazy, L. See M.L. Solera
Dove, J.L. See M. Sribney
Downey, J.E., D.H. Irving, and A.L. Tappel. *Effects of dietary antioxidants on in vivo lipid peroxidation in the rat as measured by pentane production,* 403
—— See R.E. Litov
Duff, J.A. See E.A. Moscatelli
Dunham, E.W., M. Balasingam, O.S. Privett, and E.C. Nickell. *Effects of essential fatty acid deficiency on prostaglandin synthesis and fatty acid composition in rat rental medulla,* 892
Dutky, S.R. See M.J. Thompson
Dyck, P.J. See J.K. Yao

E

Eaton, C.A. See C. Litchfield
Eliav, B. See R.F. Raicht
Elliott, William H. See J. Wendell Davis
—— See Roger Shaw
Emken, E.A. See A.C. Lanser
Erdman, J.W., Jr. and T.C. O'Reilly. *Hypercholesterolemia in rats fed cholesterol in agar gel diets,* 588
Espelie, K.E. and P.E. Kolattukudy. Communications re *the optical rotation of a major component of plant cutin,* 836

F

Feng, P. See D.C. Zimmerman
Ferezou, J. See J.C. Sulpice
Fiehn, W. *The effects of phospholipase D on the function of fragmented sarcoplasmic reticulum,* 264
Filipi, P.A. See M.J. Thompson
Finegold, H. See M.J. Thompson
Forte, T.M. See A.V. Nichols
Franke, W.W. See T.W. Keenan
Frankel, E.N. See E. Selke
—— See W.E. Neff
Fruchart, J.C. See P. Dewailly
Fukuzawa, K. See A. Tokumura

G

Gabriel, H.G., J.C. Alexander, and V.E. Valli. *Nutritional and metabolic studies of distillable fractions from fresh and thermally oxidized corn oil and olive oil,* 49
Gardner, H.W., D. Weisleder, and R. Kleiman. *Formation of trans-12,13-epoxy-9-hydroperoxy-trans-10-octadecenoic acid from 13-L-hydroperoxy-cis-9,trans-11-octadecadienoic acid catalyzed by either a soybean extract or cysteine-$FeCl_3$,* 246
Gartside, P. See M.L. Kashyap
Gercken, G. See J. Oehlenschläger
Germain, G.S. See K.M. Arneson
Gerson, T. and M.N. Wong. *The effect of protein deficiency on some rat liver lipid metabolic enzymes and CoA,* 446
Ghidoni, R., S. Sonnino, and G. Tettamanti. Communications re *behavior of gangliosides on dialysis,* 824
Gilbertson, J.R. See W.F. Naccarato
Gillies, P.J. See F.P. Bell
Glueck, C.J. See M.L. Kashyap
Goldsmith, D.P.J. and H.P. Jacobi. *Atherogenesis in swine fed several types of lipid-cholesterol diets,* 174
Gong, E.L. See A.V. Nichols
Goto, Junichi, Hiroaki Kato, and Toshio Nambara. *Separation of sulfated bile acids by high-performance liquid chromatography,* 908
Greenberg, A.J. See C. Litchfield
Grogan, W.M. See H.C. Klauda
Gronowitz, S. See B. Åkesson
Grunwald, C. *Steryl glycoside biosynthesis,* 697
Gulati, S.K., L.J. Cook, J.R. Ashes, and T.W. Scott. *Effect of feeding protected cholesterol on ruminant milk fat secretion,* 818
Gunstone, Frank. See William E.M. Lands
Gupta, A.D. See M.R. Lakshman
Gutstein, W.H. and F. Parl. *Neural factors in experimental degenerative arteriopathy,* 380

H

Hagerty, M.M. See R.E. Pitas
Hassman, A.G. and M.A. Crawford. *The incorporation of orally administered radiolabeled dihomo γ-linolenic acid (20:3ω6) into rat tissue lipids and its conversion to arachidonic acid,* 801
Hauton, J.C. See D. Lairon
Hayes, K.C. See J.L. Hojnacki
Hays, E.F. See S. Kitada
Henick, A.S. See W.L. Porter
Herslöf, B. See B. Åkesson
—— See R. Blomstrand
Hilderson, H.J. See M. De Wolf
Hincenbergs, I. See J. Tinoco
Hojnacki, J.L., R.J. Nicolosi, N. Llansa, and K.C. Hayes. Methods re *visualization of primate high density lipoproteins isolated by density gradient ultracentrifugation,* 88
Holland, R. See P.G. Roughan
Hollander, D. See S.L. Chow
Holman, R.T. See A.J. Valicenti
Hoshita, N., S. Shefer, F.W. Cheng, B. Dayal, A.K. Batta, G.S. Tint, G. Salen, and E.H. Mosbach. *Biosynthesis of chenodeoxycholic acid: Side-chain hydroxylation of 5β-cholestane-3α7α-diol by subcellular fractions of guinea pig liver,* 961
Hough, S. See L.W. Parks
Huang, William Y. and Fred A. Kumerow. Esterification of palmitic acid in swine aortic homogenates, 873
Hulan, H.W. See J.K.G. Kramer
Hynd, B.A. See M.L. Kashyap

I

Ikeda, I. See M. Sugano

Irving, D.H. See J.E. Downey
—— See R.E. Litov

J

Jacob, J. *Chemical composition of the preen gland secretions from some ciconiiform birds,* 274
Jacobi, H.P. See D.P.J. Goldsmith
Jaffe, R.M. See R.E. Pitas
Jaillard, J. See P. Dewailly
Jain, K. See M.K.P. Amma
Jensen, R.G. See R.E. Pitas
Johansson, A. and L.-A. Appelqvist. *The content and composition of sterols and sterol esters in low erucic acid rapeseed (Brassica napus),* 658
Johnson, R.C. and S.N. Shah. *Fatty acid and sterol specificity of cholesterol esterifying enzyme in developing rat brain,* 777
Johnston, P.V. See P.G. Weston
Joseph, J.M. See R.L. Conner

K

Kadowaki, M. See K. Uchida
Kandutsch, A.A. and H.W. Chen. *Inhibition of cholesterol synthesis by oxygenated sterols,* 704
Kannan, Ramaswamy, Leon Wilson, and Nome Baker. *The role of dietary fat and hepatic triglyceride secretion in cancer-induced hypertriglyceridemia*[1,2], 887
Kaplanis, J.N. See J.A. Svoboda
Karel, M. See S.H. Yong
Kashyap, M.L., L.S. Srivastava, B.A. Hynd, G. Perisutti, D.W. Brady, P. Gartside, and G.J. Glueck. *The role of high density lipoprotein apolipoprotein CII in triglyceride metabolism,* 933
Kates, M., P. Tremblay, R. Anderson, and B.E. Volcani. *Identification of the free and conjugated sterol in a non-photosynthetic diatom, Nitzschia alba as 24-methylene cholesterol,* 34
—— See A.C. Wilson
—— See S.C. Kushwaha
Kato, Hiroaki. See Junichi Goto
Kaunitz, H. *Cholesterol and repair processes in arteriosclerosis,* 373
Kaur, C. See M.K.P. Amma
Keeler, R.F. *Cyclopamine and related steroidal alkaloid teratogens: Their occurrence, structural relationship, and biologic effects,* 708
Keenan, T.W., E. Schmid, and W.W. Franke. Communications re *gangliosides of cultured cells of a rat mammary carcinoma cell line,* 451
—— See A.A. Bushway
Kelsey, M.I., G. Muschik, and S.A. Sexton. *The metabolism of lithocholic acid-3α-sulfate by human intestinal microflora,* 152
Kida, Y. See M. Sugano
Kiong, L.S. See J.H. Tyman
Kitada, S., L. Mwasi, J.F. Mead, and E.F. Hays. *Liver and thymus lipid composition in AKR mice with and without lymphomas,* 464
Klauda, H.C., F.P. Bell, W.M. Grogan, and F.W. Quackenbush. *Arylsulfonate esters of fatty alcohols: IV. Effects on cholesterol catabolism,* 627
Kleiman, R. See H.W. Gardner
—— See M.B. Bohannon
Klein, L.B. See Y.-Y. Yeh
Klein, P.D. See K.-Y. Tserng
Knapp, H.R., O. Oelz, A.R. Whorton, and J.A. Oates. *Effects of feeding ethyl-dihomo γ-linolenate on rabbit renomedullary lipid composition and prostaglandin production in vitro,* 804
Kolattukudy, P.E. See K.E. Espelie
Kramer, J.K.G., and H.W. Hulan. *The effect of dietary erucic acid on cardiac triglycerides and free fatty acid levels in rats,* 438
Kraushaar, D.S. See S. Parthasarathy
Kritchevsky, David. Influence of dietary fiber on bile acid metabolism, 982
—— and J.A. Story. *Fiber, hypercholesteremia, and atherosclerosis,* 366
Kumerow, Fred A. See William Y. Huang
Kushwaha, S.C., M. Kates, R.L. Renaud, and R.E. Subden. *The terpenyl pyrophosphates of wild type and tetraterpene mutants of Neurospora crassa,* 352

L

Lafont, H. See D. Lairon
Lagrou, A. See M. De Wolf
Lairon, D., G. Nalbone, H. Lafont, N. Domingo, and J.C. Hauton. *Protective effect of biliary lipids on rat pancreatic lipase and colipase,* 211
Lakshman, M.R., A.D. Gupta, and R.L. Veech. *Effect of chronic ethanol administration on cholesterol and bile acid synthesis in vivo,* 134
Landrey, J.R. See R.L. Conner
Lands, William E.M., Roger W. Sacks, John Sauter, and Frank Gunstone. *Selective effects of fatty acids upon cell growth and metabolic regulation,* 878
Lanser, A.C., T.L. Mounts, and E.A. Emken. *Metabolism of linoleate versus linoelaidate in the laying hen,* 103
Larkin, E.C. See G.A. Rao
Lehmann, J. Methods re *analysis alpha tocopherol in blood plasma and platelets by gas liquid chromatography,* 616
Levy, Robert I. *High density lipoproteins, 1978—an overview,* 911
Ley, H. See S.H.W. Cmelik
Lipton, L.C. See L.J. Tirri
Litchfield, C. and E.E. Marcantonio. *Occurrence of 5,9,19-Octacosatrienoic, 5,9-Hexacosadienoic and 17-Hexacosenoic acids in the marine sponge Xestospongia halichondroides,* 199
—— A.J. Greenberg, R.G. Ackman, and C.A. Eaton. *Distinctive medium chain wax esters, triglycerides, and diacyl glyceryl ethers in the head fats of the Pacific Beaked Whale, Berardius bairdi,* 860
Litov, R.E., D.H. Irving, J.E. Downey, and A.L. Tappel. Communication re *lipid peroxidation: A mechanism involved in acute ethanol toxicity as demonstrated by in vivo pentane production in the rat,* 305
—— See C.J. Dillard
Llansa, N. See J.L. Hojnacki
Lofland, H.B. See J.E. Macnintch
Lowry, R.R. See J.C. Reinert
Luddy, F.E. See J.I. Rabinowitz
Lutton, C. See J.C. Sulpice

M

Macnintch, J.E., R.W. St. Clair, H.B. Lofland, and T.B. Clarkson. *The effect of arylsulfonate esters on cholesterol-aggravated atherosclerosis in White Carneau Pigeons,* 644
Mahley, R.W. See R.E. Pitas
Major, M.A. and G.J. Blomquist. *Biosynthesis of hydrocarbons in insects: Decarboxylation of long chain acids to n-alkanes in Periplaneta,* 323
Marcantonio, E.E. See C. Litchfield
Marchand, C.M. and J.L. Beare-Rogers. *The acylation of 1-palmitylglycerol 9-phosphate with cis and trans C-16 to C-22 monoenoic fatty acids in rat liver,* 329
Marks, E.P., W.E. Robbins, and M.J. Thompson. *The effects of certain ecdysteroids and inhibitory amines and amides on the metabolism of 22,25-dideoxyecdysone in cockroach organ cultures,* 259
—— See M.J. Thompson
Marmer, William N. and Kathleen A. Pietruszka. *Rapid enzyme-induced hydrolysis of microgram amounts of phosphatidylcholine on phospholipase A_2/Celite columns,* 840
—— *Rapid transmethylation of microgram amounts of phosphatidylcholine on potassium methoxide/celite columns,* 835
Martin, R.B. and P.L. Yeagle. *Models for lipid organization in cholesterol-phospholipid bilayers including cholesterol dimer formation,* 594
Mastroianni, A. See M.S. Metzman
Masumura, M. See T. Takagi
Maché, D. See J.C. Sulpice
Mayzaud, P. and R.G. Ackman. *The 6,9,12,15,18-heneicosapentaenoic acid of seal oil,* 24
McCullough, M.S. See S.K. Das
McLean-Bowen, C. See L.W. Parks
McMorris, T.C. *Sex hormones of the aquatic fungus Achlya,* 716
Mead, J.F. See G.-S. Wu
—— See S. Kitada
Medwadowski, B. See J. Tinoco
Menkes, J.H. See E.E. Aeberhard
Mercuri, O. and M.E. De Tomas. Communication re *Δ9 desaturase activity in normal mouse liver and hepatoma SSIK,* 289
Metzman, M.S., A. Mastroianni, and J.F. Strauss, III. Communications re *fatty acid composition of un-*

fertilized and fertilized eggs of the Sea Urchin, Arbacia punctulata, 827
Mikolajczak, K.L. and D. Weisleder. Communications re ^{13}C *nuclear magnetic resonance spectroscopy of cyanolipids and cyanolipid-containing seed oils*, 514
Miljanich, P. See J. Tinoco
Miller, N.E. *The evidence for the antiatherogenicity of high density lipoprotein in man*, 914
Milner, J.A. and E.G. Perkins. *Liver lipid alterations in rats fed arginine deficient diets*, 563
Mitsuno, Y. See T. Takagi
Montecucco, C. See G.A. Smith
Montfoort, A. and W.A.M. Boere. *Cholesterol and phospholipid composition of erythroblasts isolated from mouse spleen and rauscher leukemia virus infection*, 580
Moore, J.H. See R.C. Noble
Morioka, H. See M. Sugano
Mosbach, E.H. See N. Hoshita
—— See R.F. Raicht
Moscatelli, E.A. and J.A. Duff. Communication re *effects of storage conditions on rat brain ethanolamine glycerophospholipids, cerebrosides, and cholesterol*, 294
Mounts, T.L. See A.C. Lanser
Murphy, F. See W.L. Porter
Muschik, G. See M.I. Kelsey
Mwasi, L. See S. Kitada

N

Naccarato, W.F. and J.R. Gilbertson. *Effect of pentadecan-2-one on lipid metabolism in HeLa cells*, 344
Nair, P.P., Robert Solomon, Joyce Bankoski, and Robert Plapinger. *Bile acids in tissues: Binding of lithocholic acid to protein*[1,2], 966
Nalbone, G. See D. Lairon
Nambara, Toshio. See Junichi Goto
Neff, W.E., E.N. Frankel, C.R. Scholfield, and D. Weisleder. *High-pressure liquid chromatography of autoxidized lipids: I. Methyl oleate and linoleate*, 415
—— See E. Selke
Nelson, G.J. See R.E. Pitas
Nes, W.R. See R.L. Conner
Nichols, A.V., E.L. Gong, T.M. Forte, and P.J. Blanche. *Interaction of plasma high density lipoprotein HDL_{2b} (d 1.063–1.100 g/ml) with single-bilayer liposomes of dimyristoylphosphatidylcholine*, 943
Nickell, E.C. See E.W. Dunham
Nicolosi, R.J. See J.L. Hojnacki
Nielsen, H. *Reaction between peroxidized phospholipid and protein: 1. Covalent binding of peroxidized cardiolipin to albumin*, 253
Nilsson-Ehle, P., S. Carlstrom, P. Belfrage. *Effects of ethanol intake on lipoprotein lipase activity in adipose tissue of fasting subjects*, 433
Noble, R.C., J.H. Shand, A.W. Bell, G.E. Thompson, and J.H. Moore. *The transfer of free palmitic and linoleic acids across the ovine placenta*, 610
Nomura, Y. See K. Uchida
Norman, A.W. See J.A. Putkey
Nouvelot, A. See P. Dewailly

O

Oates, J.A. See H.R. Knapp
O'Doherty, P.J.A. Communication re *steric requirements for the stimulation of glycosyltransferase activity by lysophosphatidylcholine*, 297
Oehlschlager, A.C. See R.L. Renaud
Oehlenschläger, J. and G. Gercken. *Synthesis and mass spectrometry of 1-Acyl and 3-Acyl-sn-Glycerol carbonates*, 557
Oelz, O. See H.R. Knapp
Ohlrogge, J.B., M.R. Pollard, and P.K. Stumpf. *Studies on biosynthesis of waxes by developing jojoba seed tissue*, 203
Ohlson, R. See B. Åkesson
Okuno, I. See K. Uchida
Olsen, M. See P.O. Darnerud
O'Reilly, T.C. See J.W. Erdman, Jr.
Osmundsen, H. See R.Z. Christiansen

P

Paltauf, F. Letter to the editor re *preparation of choline and ethanolamine plasmalogens by enzymatic hydrolysis of the accompanying diacyl analogs*, 165
Parks, L.W., C. McLean-Bowen, F.R. Taylor, and S. Hough. *Sterols in yeast subcellular fractions*, 730
—— and V.K. Stromberg. *Measurement in vitro of the esterification of yeast sterols*, 29
Parl, F. See W.H. Gutstein
Parthasarathy, S., R.K. Cady, D.S. Kraushaar, N.E. Sladek, and W.J. Baumann. Communications re *inhibition of diacylglycerol:CDPcholine cholinephosphotransferase activity by dimethylaminoethyl p-chlorophenoxyacetate*, 161
Patt, C.S. See F.P. Bell
Pennington, S.N. and C.P. Smith. *Indomethacin stimulation of lipid peroxidation and chemiluminescense in rat liver microsomes*, 636
Perisutti, G. See M.L. Kashyap
Perkins, E.G. See J.A. Milner
Perkins, R.G. and R.E. Scott. *Differences in the phospholipid, cholesterol, and fatty acyl composition of 3T3 and SV3T3 plasma membranes*, 653
—— and R.E. Scott. *Plasma membrane phospholipid, cholesterol and fatty acyl composition of differentiated and undifferentiated L_8 myoblasts*, 334
Phillips, W.A. See F.P. Bell
Pierce, A.M. See R.L. Renaud
Pietruszka, Kathleen A. See William N. Marmer
Pike, R.L. See C. Chang
Pitas, R.E., G.J. Nelson, R.M. Jaffe, and R.W. Mahley. *Δ15,18-Tetracosadienoic acid content of sphingolipids from platelets and erythrocytes of animals fed diets high in saturated or polyunsaturated fats*, 551
—— M.M. Hagerty, and R.G. Jensen. *Transport of diacylalkylglycerols in chylomicrons and very low density lipoproteins of rat intestinal lymph following intragastric administration of 1,3-dioctadecenoyl-2-hexadecylglycerol*, 844
Plapinger, Robert. See P.P. Nair
Pollard, M.R. See J.B. Ohlrogge
Porfert, G. See W.L. Porter
Porter, W. L., A.S. Henick, F. Murphy, R. Colgan, and G. Porfert. *Autoxidation and effects of pro- and antioxidants in lyophilized red blood cell membranes*, 137
Privett, O.S. See E.W. Dunham
Putkey, J.A., W.R. Wecksler, and A.W. Norman. *The interaction of 1,25-Dihydroxyvitamin D_3 with its intestinal mucosa receptor: Kinetic parameters and structural requirements*, 723

Q

Quackenbush, F.W. See H.C. Klauda
Qureshi, N. See K. Takayama

R

Rabinowitz, J.I., S.E. Askins, and F.E. Luddy. *Lipid composition and biosynthesis of human omental tissue*, 317
Raicht, R.F., B.I. Cohen, B. Eliav, and E.H. Mosbach. *Sterol metabolism studies in rats: Effects of taurodeoxycholic acid feeding on sterol metabolism*, 605
Rao, G.A. and S. Abraham. Communications re *triglyceride synthesis from dihydroxyacetone phosphate and palmitate by microsomes from mammary glands of lactating mice*, 95
—— K. Siler, and E.C. Larkin. Communications re *reduction in medium chain acids and monoenoic acids in livers and plasma of rats fed eicosa-5,8,11,14-tetraynoic acid*, 356
Reinert, J.C., R.R. Lowry, and H.H. Wickman. Methods re *synthesis of a monobrominated analog of dipalmitoyl lecithin*, 85
Reisser, D. and P. Boucrot. *In vitro and in vivo effects of exogenous lipids on the enzymatic hydrolysis of rat bile phospholipids*, 796
—— See P. Boucrot
Reitz, R.C. See J.A. Thompson
Renaud, R.L., R.E. Subden, A.M. Pierce, and A.C. Oehlschlager. *Sterol composition of Neurospora carssa*, 56
—— See S.C. Kushwaha
Robbins, W.E. See E.P. Marks
—— See J.A. Svoboda
—— See M.J. Thompson
Robinson, R.D. See M.P. Carpenter
Roughan, P.G., C.R. Slack, and R. Holland. *Generation of phospholipid artefacts during extraction of developing soybean seeds with methanolic solvents*, 497

Roy, T., C.R. Treadwell, and G.V. Vahouny. Communications re *comparative intestinal and colonic absorption of [4-^{14}C] cholesterol in the rat*, 99
Rupar, C.A. and K.K. Carroll. Communication re *occurrence of dolichol in human tissues*, 291
Ryan, R.J. See J.K. Yao

S

Sacks, Roger W. See William E.M. Lands
St. Clair, R.W. See J.E. Macnintch
Salen, G. See N. Hoshita
Sareen, K. See M.K.P. Amma
Sauter, John. See William E.M. Lands
Scanu, Angelo M. *Ultrastructure of serum high density lipoproteins: Facts and models*, 920
Schmid, E. See T.W. Keenan
Schmid, H.H.O. See P.C. Schmid
Schmid, P.C., Y. Wedmid, and H.H.O. Schmid. Communications re *15-methyl-1, 2-hexadecanediol, a major constituent of hamster surface wax*, 829
Schnoes, H.K. See K. Takayama
Scholfield, C.R. See W.E. Neff
Schonfeld, Gustav, Alberta Bailey, and Robert Steelman. *Plasma, apolipoprotein A-I and A-II levels in hyperlipidemia*, 951
Scott, R.E. See R.G. Perkins
Scott, T.W. See S.K. Gulati
Selke, E., E.N. Frankel, and W.E. Neff. Communications re *thermal decomposition of methyl oleate hydroperoxides and identification of volatile components by gas chromatography-mass spectrometry*, 511
Sexton, S.A. See M.I. Kelsey
Sezille, G. See P. Dewailly
Sgoutas, D.S. See F. Szlam
Shah, S.N. See R.C. Johnson
Shand, J.H. See R.C. Noble
Sharma, S. See M.K.P. Amma
Shaw, Roger and William H. Elliott. *Bile acids LVII. Analysis of bile acids by high pressure liquid chromatography and mass spectrometry*, 971
Shefer, S. See N. Hoshita
Sherman, A.R. *Lipogenesis in iron-deficient adult rats*, 473
Siler, K. See G.A. Rao
Singh, S. See M.K.P. Amma
Sklan, D. and P. Budowski. Communications re *hydrolysis of biliary phospholipids in the upper small intestine of the chick*, 158
Slack, C.R. See P.G. Roughan
Sladek, N.E. See S. Parthasarathy
Slawson, V., A.W. Adamson, and R.A. Stein. *Evidence for singlet oxygen in the air oxidation of surface adsorbed 2,5-diphenylfuran*, 128
Smith, C.P. See S.N. Pennington
Smith, F.R. *Hyperlipidemia and premature arteriosclerosis*, 375
Smith, G.A., C. Montecucco, and J.P. Bennett. Methods re *isotopic labeling of phosphatidylcholine in the choline moiety*, 92
Solera, M.L., N. Dousset, P. Valdiguie, and L. Douste-Blazy. Communications re *the influence of purines on plasma lecithin:cholesterol acyltransferase activity in the rat*, 619
Solomon, Robert. See P.P. Nair
Somes, R.G., Jr. See H.E. Walker
Sonnino, S. See R. Ghidoni
Spector, A.A. See C.P. Burns
Sribney, M. and J.L. Dove. *Synthesis of acyl-S-pantetheine by rat liver microsomes*, 422
Srivastava, L.S. See M.L. Kashyap
Steelman, Robert. See Gustav Schonfeld
Steen, M.E. See S.K. Das
Stein, R.A. See G.-S. Wu
—— See V. Slawson
Story, J.A. See D. Kritchevsky
Strauss, J.F., III. See M.S. Metzman
Stromberg, V.K. See L.W. Parks
Stumpf, P.K. See J.B. Ohlrogge
Subden, R.E. See R.L. Renaud
—— See S.C. Kushwaha
Sugano, M., H. Morioka, Y. Kida, and I. Ikeda. *The distribution of dietary plant sterols in serum lipoproteins and liver subcellular fractions of rats*, 427
Sulpice, J.C., J. Ferezou, C. Lutton, D. Mathé, and F. Chevallier. *Diet and sterol biohydrogenation in the rat: Occurrence of epicoprostanol*, 217
Sundholm, F., A. Visapää, and J. Björksten. *Cross-linking of collagen in the presence of oxidizing lipid*, 755
Suzuki, T. See A. Tokumura
Svensson, L. See R. Blomstrand
Svoboda, J.A., M.J. Thompson, W.E. Robbins, and J.N. Kaplanis. *Insect steroid metabolism*, 742
Szlam, F. and D.S. Sgoutas. *Eicosenoic and docosenoic acid incorporation in serum lipoproteins in rats fed rapeseed oil*, 121

T

Takagi, T., Y. Mitsuno, and M. Masumura. *Determination of peroxide value by the colorimetric iodine method with protection of iodide as cadmium complex*, 147
Takase, H. See K. Uchida
Takayama, K., N. Qureshi, and H.K. Schnoes. *Isolation and characterization of the monounsaturated long chain fatty acids of Mycobacterium tuberculosis*, 575
Takeuchi, N. See K. Uchida
Tappel, A.L. See C.J. Dillard
—— See J.E. Downey
—— See R.E. Litov
Taylor, F.R. See L.W. Parks
Tettamanti, G. See R. Ghidoni
Thompson, G.E. See R.C. Noble
Thompson, J.A. and R.C. Reitz. *Effects of ethanol ingestion and dietary fat levels on mitochondrial lipids in male and female rats*, 540
Thompson, M.J., E.P. Marks, W.E. Robbins, S.R. Dutky, P.A. Filipi, and H. Finegold. *Isolation and identification of the metabolites of 22,25-dideoxyecdysone from cockroach fat body cultures*, 783
—— See E.P. Marks
—— See J.A. Svoboda
Thompson, R.M. See M. Bard
Thuy, L.P. See M.P. Carpenter
Tinoco, J., R. Babcock, I. Hincenbergs, B. Medwadowski, and P. Miljanich. *Linolenic acid deficiency: Changes in fatty acid patterns in female and male rats raised on a linolenic acid-deficient diet for two generations*, 6
Tint, G.S. See N. Hoshita
Tirri, L.J., N.K.N. Ayengar, L.C. Lipton, N. Chatterjie, and H. Brockerhoff. *Studies on the hydrogen belts of membranes: III. Glycerol permeability of dihydrosphingomyelin-cholesterol membranes*, 267
Tokumura, A., K. Fukuzawa, and H. Tsukatani. Communications re *effects of synthetic and natural lysophosphatidic acids on the arterial blood pressure of different animal species*, 572
—— K. Fukuzawa, Y. Akamatsu, S. Yamada, T. Suzuki, and H. Tsukatani. *Identification of vasopressor phospholipid in crude soybean lecithin*, 468
Treadwell, C.R. See T. Roy
Tremblay, P. See M. Kates
Tserng, K.-Y. and P.D. Klein. *Bile acid sulfates: II. Synthesis of 3-monosulfates of bile acids and their conjugates*, 479
Tsukatani, H. See A. Tokumura
Tulliez, J.E. and G.F. Bories. *Metabolism of a n-paraffin, heptadecane, in rats*, 110
Tyman, J.H. and L.S. Kiong. *Long chain phenols: Part XI. Composition of natural cashew nutshell liquid (Anacardium occidentale) from various sources*, 525

U

Uchida, K., I. Okuno, H. Takase, Y. Nomura, M. Kadowaki, and N. Takeuchi. *Distribution of bile acids in rats*, 42

V

Vahouny, G.V. See T. Roy
Valdiguie, P. See M.L. Solera
Valicenti, A.J., C.J. Chapman, R.T. Holman, and J.R. Chipault. *Mass spectrometric identification of C_{20} fatty acids in bovine lens using the pyrrolidide derivative*, 190
Valli, V.E. See H.G. Gabriel
van den Besselaar, A.M.H.P. See O.M. de Oliveira
van den Bosch, H. See O.M. de Oliveira
Vatassery, G.T. and R. Younoszai. Communications re *alpha tocopherol levels in various regions of the central nervous systems of the rat and guinea pig*, 832
Veech, R.L. See M.R. Lakshman
Visapää, A. See F. Sundholm
Volcani, B.E. See M. Kates

W

Wahlström, B. See P.O. Darnerud
Walker, B.L. See A.K. Young
—— See V.A. Wilbur
Walker, H.E. and R.G. Somes, Jr. *Uropygial gland alkane diol diesters in the K^{w} mutation of the domestic chicken,* 492
Wander, J.D. See R.M. Arneson
Warnick, G. Russell. See John J. Albers
Wecksler, W.R. See J.A. Putkey
Wedmid, Y. See P.C. Schmid
Wei, S.-P.L. See C.P. Burns
Weisleder, D. See H.W. Gardner
—— See K.L. Mikolajczak
—— See W.E. Neff
Weston, P.G. and P.V. Johnston. *Cerebral prostaglandin synthesis during the dietary and pathological stresses of essential fatty acid deficiency and experimental allergic encephalomyelitis,* 408
—— and P.V. Johnston. *Incidence and severity of experimental allergic encephalomyelitis and cerebral prostaglandin synthesis in essential fatty acid deficient and aspirin-treated rats,* 867
Whorton, A.R. See H.R. Knapp
Wichman, H.H. See J.C. Reinert
Wiegand, R.D. See R. Wood
Wilbur, V.A. and B.L. Walker. *Effect of dietary vitamin C on adrenal cholesteryl ester content in the guinea pig,* 116
Wilson, A.C., M. Kates, and A.I. de la Roche. *Incorporation of [1-^{14}C] acetate into lipids of soybean cell suspensions,* 504
Wilson, K.J. See M. Bard
Wilson, Leon. See Ramaswamy Kannan
Wong, M.N. See T. Gerson
Wood, R. and F. Chumbler. *Distribution of dietary octadecenoate isomers at the 1- and 2-positions of hepatoma and liver phospholipids,* 75
—— F. Chumbler, and R.D. Wiegand. *Effect of dietary cyclopropene fatty acids on the octadecenoates of individual lipid classes of rat liver and hepatoma,* 232
Wu, G.-S., R.A. Stein, and J.F. Mead. *Autoxidation of fatty acid monolayers adsorbed on silica gel: III. Effects of saturated fatty acids and cholesterol,* 517

Y

Yamada, S. See A. Tokumura
Yao, J.K., S.C.S. Chang, R.J. Ryan, and P.J. Dyck. *A model for studying LCAT reaction: In vitro cholesterol esterification in pig ovarian follicular fluid,* 225
Yeagle, P.L. See R.B. Martin
Yeh, Y.-Y., L.B. Klein, and P. Zee. *Long and medium chain triglycerides increase plasma concentrations of ketone bodies in suckling rats,* 566
Yong, S.H. and M. Karel. *Reactions between peroxidizing lipids and histidyl residue analogues: Enhancement of lipid oxidation and browning by 4-methylimidazole,* 1
Young, A.K. and B.L. Walker. *The circadian cycles of plasma corticosterone and adrenal cholesteryl esters in the normal and EFA-deficient female rat,* 181
Younoszai, R. See G.T. Vatassery
Yudkin, J. *Dietary factors in arteriosclerosis: Sucrose,* 370

Z

Zee, P. See Y.-Y. Yeh
Zimmerman, D.C. and P. Feng. *Characterization of a prostglandin-like metabolite of linolenic acid produced by a flaxseed extract,* 313

SUBJECT

A

Absorption, bile salts, regulation by amphiphiles, 187
Absorption, rat, alkyldiacylglycerol stereoisomers, 338
—— heptadecane, 110
—— triglyceride stereoisomers, 338
Acetate-^{14}C, incorporation by soybean cell suspensions, 504
1-^{14}C Acetate, incorporation into human omental tissue, 317
^{14}C-Acetate, incorporation by cockroach, 323
N-Acetylglucosaminyltransferase, activity, rat villus microsomes, effect of LPC and detergents, 297
Activation energy, glycerol penetration, diphosphatidylsphingomyelin-membranes, effect of cholesterol, 267
Acyl-CoA synthetase, protein deficiency, 446
Acyl-S-pantetheine, synthesis by rat liver microsomes, 422
Acyl-sn-glycerol-carbonates, physical properties, 557
—— synthesis, 557
Acylsterylglycosides, tobacco and barley, 697
Acyltransferase, *cis, trans* isomers, 329
—— configurational specificity, 329
—— rat liver microsomes, 329
Adenine, inhibition of LCAT activity *in vitro,* 619
Adipose, lipoprotein lipase activity, 433
Adipose, hamster, stearoyl CoA desaturase, 622
Adipose, rabbit, effect of phthalate esters on lipid biosynthesis, 673
Adipose, rat, effect of phthalate esters on lipid biosynthesis, 673
Adipose tissue, elephant, FA comp, TG, 195
Adipose tissue, rat, 18:3ω3 deficient, fatty acid comp, 6
—— dietary heptadecane metabolite lipid distribution, 110
—— lipogenesis and iron-deficiency, 473
Adjuvant, Freunds, EAE production in rat, 867
Adrenal, guinea pig, effect of vitamin C on cholesteryl esters, 116
—— cholesteryl ester, fatty acids, 116
Adrenal, rat, cholesteryl esters, circadian cycle, 181
—— 18:3ω3 deficient, fatty acid comp, 6
Adrenals, human, dolichol, isolation, quantitation, free and esterified, 291
Agar, in diet of cholesterol fed rat, 588
Albumin, covalent binding to peroxidized phospholipid, 253
—— separation from lipid, gel filtration, 253
Alcohols, oxidation to fatty acids, 274
Aldehydes, collagen cross linking, 755
Algae, mutants, 533
—— sterols, 533
Alkaloids, teratogenicity of cyclopamine, 708
Alkanediols, diesters, chicken uropygial gland, 492
1,2-Alkanediols, branched, hamster skin wax diester, 829
n-Alkanes, biosynthesis in insects, 323
Alkanols, HeLa cells, 344
Alkoxy glycerides, elephant temporal gland, FA comp, 195
Alkylglycerol, diacyl, transport in chylomicrons and VLDL, 844
Alkyldiacylglycerol, stereoisomers, absorption, rat, 338
Allergic encephalomyelitis, experimental, effect of aspirin and/or EFA-deficiency in rats, 867
Alpha lipoproteins, see lipoproteins, HDL
Alumina-AgNO$_3$, TLC, sterols, 217
Amides, effect on molting hormone, cockroach leg regenerate assay system, 259
Amines, effect on molting hormone, cockroach leg regenerate assay system, 259
Amino acids, effect on intestinal absorption of 20:4, 768
cAMP, fatty acid Δ6 desaturase, 649
Amphiphiles, effect on micelle formation, 187
Amphipods, *Parathemisto gaudichaudi,* in sei whale stomach, 18
Amphotericin B, membrane perturbation, interaction with sterols, 686
Anacardic acid, dtmn, cashew nutshell liquid, 525
Anacardium occidentale, see cashew nut
β-Andrenergic blocking agents, effect on linoleate desaturation, 649
Anophthalmia, teratogenicity of cyclopamine in sheep, 708
Antheriodiol, hormone in *Achlya* from fucosterol, 716
Anti-juvenile hormone, review, 736
Antibiotics, polyene, membrane perturbation, interaction with sterols, 686
Antioxidant, assay, neuroblastoma lipid, 383
—— mouse neuroblastoma, 391
—— neoplastic cells, 383
Antioxidants, BHA, BHT, and BHQ, topanol-354, to-

copherol, trolox c, propylgallate, effectiveness, model system, 137
—— dietary, pentane production in rat, 403
—— effect of cobalt ions, erythrocyte ghosts, model system, 137
—— effect on oxygen uptake, erythrocyte ghosts, model system, 137
—— effect on pentane production in the rat, 403
—— effectiveness, erythrocyte ghosts, model system, 137
—— erythrocyte ghosts, model system, 137
—— maintenance of polyene macrolide antibiotic activity, 686
—— quantitation following TLC, BHT, TBHQ, BHA, tocopherol, phytol, 137
—— uptake of, erythrocyte ghosts, model system, 137
Aorta, pigeon, arylsulfonate esters and hypercholesterolemia, 644
Aorta, swine, palmitic acid incorporation, 873
Apolipoproteins, A-I and A-II levels in hyperlipidemia, 951
—— C-II and C-III, hypertriglyceridemia, 933
Aquatic fungi, fucosterol and hormone production in *Achlya*, 716
Arachidonate, ^{14}C incorporation and modification in mouse leukemia cells, 666
Arachidonic acid, absorption in rat intestine, 768
—— formation from 20:3ω6, 801
—— indomethacin and lipid peroxidation, 636
—— metabolism, rat, 356
Arbacia punchtulata, see Sea Urchin
Arginine, deficiency and rat liver lipids, 563
Arteriosclerosis, cholesterol, 373
—— coronary thrombosis, 378
—— diet, 370, 373
—— hyperlipidemia, 375
—— myocardial infarction, 378
—— neural factors, 380
—— premature, 375
—— sucrose, 370
Arylsulfonate esters, cholesterol excretion in the rat, 627
Ascites, Ehrlich, incorporation of elaidic acid, 850
Aspirin, prostaglandin production in EAE, 867
—— salicylate assay, 867
Atherogenesis, minipigs, effect of diet, 174
Atherogenic diets, minipigs, 174
Atherosclerosis, diet, 360
—— dietary fiber, 366
—— dietary protein, 360
—— HDL, review, 914
—— protein, 360
Atherosclerotic index, pigeons, hypercholesterolemia, arylsulfonate esters, 644
Autacoids, prostaglandins and thromboxanes, 878
Autoxidation, effect of cobalt ions, erythrocyte ghosts, 137
—— HPLC of reaction products, 415
—— linoleic acid, monolayers on silica gel, 517
—— model system, erythrocyte ghosts, 137
—— model system with 4-methyl imidazole, 1
—— methyl linoleate, effect of 4-methyl imidazole, 1
—— oleate and linoleate, 415
—— oxygen uptake, erythrocyte ghosts, 137
Auxotrophs, unsaturated fatty acid requiring, 878
Δ^5-Avenasterol, rapeseed oil sterols, *B. napus*, 658
Azasteroid, ecdysone metabolism in fat body culture, 783
Azasteroids, effect on insect molting and development, 742
—— effect on molting hormone, cockroach leg regenerate assay system, 259
Azasterol, yeast subcellular fractions, 730
Azide, effect on intestinal absorption of 20:4, 768

B

Bacteria, production with Δ^4 to Δ^{15} *cis*-methylene octadecenoates, 878
Barley, etiolated, roots, steryl glycosides, 697
Beef brain, isolation sphingomyelin, prep N-oleoyldihydrosphingomyelin, 267
3-0-Benzyl-sn-glycerol-1,2-carbonate, synthesis, 557
Berardius bairdi, see whale
Bile, bile acid comp in man fed bran, 982
Bile acid, separation from cholesterol, TLC, 134
—— sulfates, synthesis, 479
—— synthesis rat liver, effect of ethanol, 134
Bile acid profile, guinea pig gall bladder bile, 961
Bile acid sulfates, solubility of salts, 479
Bile acids, adsorption to fiber, 982
—— coupling to protein by 1-cyclohexyl-3-(2-morpholino ethyl) carbodiimide metho-p-toluenesulfonate, 966
—— enzymatic assay, HPLC, GLC, GLC-MS, 976
—— excretion in man, effect of fiber, 982
—— HPLC, 971
—— comp and tissue distribution, 42
—— rat, pool size, on control and cholesterol supplemented diet, 42
Bile acids, rat, synthesis, secretion and turnover, 42
—— synthesis guinea pig liver fractions, 961
Bile acids, sulfated, HPLC, 908
Bile duct, cannulation in rat, 627
—— cannulation, rat, 976
Bile duct, rat, cannulation, 791
Bile, human, HPLC, electron impact mass spectrometry, 971
Bile lipoprotein complex, stabalization, pancreatic lipase and colipase, 211
Bile, rat, bile acids, 605
—— effect of exogenous lipids on hydrolysis of PL, 796
—— HPLC, electron impact mass spectrometry, 971
—— PL, sterol, bile acid distribution, effect of cholesterol, 42
Bile salt, micelle formation, effect of amphiphiles, 187
Bile salts, effect on pancreatic lipase and colipase, 211
—— regulation of absorption by amphiphiles, 187
Biliary phospholipids, intestinal hydrolysis, 158
—— rat, stabalization, pancreatic lipase and colipase, 211
Biosynthesis, human omental tissue, 317
—— hydrocarbons, in insects, 323
Blood pressure, lysophosphatidic acids, rat, rabbit, cat, guinea pig, 572
Blubber, sei whale, TG, phospholipid, FFA, comp, 18
Blubber, whale, wax esters, TG, ethers, fatty acid, alcohol profile, 860
Bovine eye, optic nerve PC, PI, PE, PS, SPM, cerebrosides and sulfate, 679
Bovine lens, C_{20} unsaturated FA, identification, mass spectra, 190
Bovine mammary, golgi, glycosyltransferase assay, 56
—— higher gangliosides, synthesis and comp, 59
—— isolation of gangliosides, 59
Bovine optic nerve, PL and glycolipid comp, fatty acid profiles, 679
Bovine serum albumin, modification by bile acids, 966
Bovine thyroid, acid triacylglycerol lipase, 598
Brain, beef, isolation sphingomyelin, prep N-oleoyldihydrosphingomyelin, 267
Brain, guinea pig, α-tocopherol content, 832
Brain, rat, cholesterol esterification, fatty acid specificity, 777
—— 18:3ω3 deficiency, phospholipid comp, 6
—— incorporation of 20:3ω6, 801
—— lipid, extraction, comp, effect of storage conditions, 294
—— prostaglandin production, aspirin and/or EFA deficiency, 867
—— prostaglandin synthesis, 408
—— α-tocopherol content, 832
Bran, bile acid comp in man, 982
Brassicasterol, rapeseed oil sterols, *B. napus*, 658
Breath, rat, pentane, indication of lipid peroxidation, ethanol fed rats, 305
Browning, measurement of, spectrophotometric, 1

C

Calcium uptake, sarcoplasmic reticulum, in vitro, effect of pH and phospholipase D hydrolysis, 264
Campesterol, distribution in rat, 427
—— rapeseed oil sterols, *B. napus*, 658
Cancer, colorectal, bile acids, dietary fat, 976
Cannulation, bile duct, rat, 791, 976
—— rat bile duct, 627
—— rat intestinal lymph, 844
Carcinoma, murine, hypertriglyceridemia, dietary fat, 887
Carbonyl group, dtmn with 2,4-DNPH, 1
Cardiolipin, rat brain, content, 294
—— rat heart mitochondria, FA comp, effect dietary rapeseed oil, 301
—— rat liver mitochondria, 540
Cardiolipin, ox heart, isolation, chromatography column, 253
Cardiolipin, peroxidized, covalent binding to protein, model system, 253
Cardiomyopathic hamster, stearoyl CoA desaturase in adipose and liver, 622
Cardol, dtmn, cashew nutshell liquid, 525
Carnitine, rat liver, 566
Carnitine palmitoyltransferase, rat hepatocytes, 487
—— rat liver, 566
β-Carotene, HDL isolation, 88
Cashew nutshell liquid, phenols, long chain, extraction and comp, 525
Cat, blood pressure and lysophosphatidic acids, 572
Catalase, indomethacin and lipid peroxidation, 636
Cebocephaly, teratogenicity of cyclopamine in sheep, 708
Celite, microcolumn, potassium methoxide, 835
—— prep of microreaction columns, immobilized phospholipase A_2, 840

Cell culture, HeLa cells, and pentadecan-2-one, 344
—— mouse neuroblastoma cells, 383
—— inhibitors of sterol synthesis, 704
—— mutant algae, 533
—— rat heart, muscle and endothelium, 809
—— rat mammary carcinoma, gangliosides, 451
—— soybeans, 504
Cell transformation, mouse embryo cells, 3T3, SV3T3, PL, FA, 653
Cells, leukemia, L1210, FA incorporation into lipid classes, 666
Cellular differentiation, control in L_6 myoblasts, 334
—— L_6 myoblasts, 334
Cellulose, influence of dietary fiber on bile acid metabolism, 982
Centrifugation, density gradient, lipoproteins, 88
—— marker enzymes, 961
Centrifugation, zonal, triglyceride lipase isolation, 598
Cerebellum, guinea pig, α-tocopherol content, 832
Cerebellum, rat, α-tocopherol content, 832
Cerebroside sulfate, bovine optic nerve, PL and fatty acid profile, 679
Cerebrosides, bovine optic nerve, PL and fatty acid profile, 679
—— isolation, rat brain lipid extract, TLC, 294
—— rat brain content, effect of storage, 294
Chemiluminescense, indomethacin, rat liver microsomes, 636
Chemotropic growth, hormones, aquatic fungi, 716
Chenodeoxycholate, in hypercholesterolemic rat, 627
Chenodeoxycholic acid, synthesis, guinea pig liver fractions, 961
Chenodeoxycholic acid-3-sulfate, HPLC, 908
Chick intestine, interaction with 1,25-dihydroxyvitamin D_3, 723
Chick small intestine, hydrolysis, biliary phospholipids, 158
Chicken, lipids of uropygial gland, 492
—— mutants, lipids, wax diesters, 492
Chlamydomonas reinhardi, see algae
Chloroform, contribution to ethyl ester artifacts, 835
Cholanoylamino acid hydrolase, clostridial, bound lithocholic acid in liver, 966
Cholenic acids, synthesis from lithocholic acid-3α-sulfate, 152
Cholentates, lithocholic acid-3α-sulfate, conversion intestinal microflora, 152
Cholestane-3β,5α-diol, inhibition of cholesterol biosynthesis, 704
Cholestane-3β,6β-diol, inhibition of cholesterol biosynthesis, 704
Cholestane-3β,5α,6β-triol, inhibition of cholesterol biosynthesis, 704
4-Cholestene-3,6-dione, inhibition of cholesterol biosynthesis, 704
5α-Cholestane-3,6-dione, inhibition of cholesterol biosynthesis, 704
5-β-Cholestane-3α, 7α-diol, hydroxylation, guinea pig liver, 961
5β-Cholestane triols, synthesis by guinea pig liver fractions, 961
Cholesterol, active and inactive elephant temporal gland, content, 195
—— addition to various rat diets, 588
—— arteriosclerosis, 373
—— bilayer models with PL, 594
—— biohydrogenation in goats and cows, 818
—— content rat feces, effect of diet, 217
—— conversion to bile acid, ethanol fed rat, 134
—— dietary plant sterols, 427
—— esterification, fatty acid specificity, 777
—— GLC, 110
—— hepatic synthesis, effect of phthalate esters, 66
—— human omental tissue, 317
—— in the diet of the White Carneau pigeon, 644
—— inhibition of synthesis in cell cultures, 704
—— intestinal absorption, arylsulfonate esters, 627
—— isolation, rat brain lipid extract, TLC, 294
—— linoleic acid autoxidation in monolayers, 517
—— lipoprotein, rapeseed fed rat, 121
—— liver and thymus of lymphoma-bearing mouse, 464
—— liver, effect of taurodeoxycholate, 605
—— membrane perturbation by polyene macrolide antibiotics, 686
—— metabolism in taurodeoxycholate fed rats, 605
—— L_6 myoblasts, differentiated and undifferentiated, 334
—— plasma, effect of taurodeoxycholate, 605
—— protected, effect on milk production, 818
—— rabbit serum, effect of phthalate esters, 673
—— rat, and 1,2-propanediol, 455
—— rat brain, content, effect of storage, 294
—— rat liver and arginine deficiency, 563
—— rat renal medulla, effect of gestation, 167
—— rat serum effect on phthalate esters, 673
—— separation from bile acids, TLC, 134
—— separation from dolichol, column chromatography, 291
—— separation from hydrocarbons, aluminum oxide column, 195
—— serum of iron-deficient rat, 473
—— site of intestinal absorption in rat, 99
—— supplemented diet, rat, effect on bile distribution, 42
—— synthesis from plant sterols by insects, 742
—— synthesis rat liver, effect of ethanol, 134
—— trans membrane movement in resting cells, 686
Cholesterol, absorption, rat, 99
Cholesterol content, pig serum and ovarian follicular fluid, 225
—— serum of iron-deficient rat, 473
Cholesterol esterification, serum and ovarian follicular fluid, pig, rate, 225
Cholesterol esterifying enzyme, fatty acid specificity, rat brain, 777
Cholesterol, serum, effect of atherogenic diets, minipigs, 174
—— rat, effect of phthalate esters, 66
Cholesterol uptake, cholic acid effect, rat intestine, 239
—— in vitro, everted rat intestine, kinetic and thermodynamic aspects, 239
—— rate constants, effect of temp, rat intestine, 239
Cholesterol uptake, intestinal, kinetic and thermodynamic aspects, 239
Cholesteryl acetate, linoleic acid autoxidation in monolayers, 517
Cholesteryl esters, adrenal, effect of vitamin C deficiency, 116
—— adrenal, fatty acid comp, 116
—— egg yolk, incorporation of linoleate and linoelaidate, 103
—— liver and thymus lymphoma-bearing mouse, 464
—— quantitation, cholesterylpenta internal standard, 116
—— rat, and 1,2-propanediol, 455
Cholesteryl ester hydrolase, dtmn in rat liver, 627
Cholesteryl esters, elephant temporal gland, FA comp, 195
—— lipoprotein fatty acid comp, rapeseed fed rat, 121
—— product of LCAT reaction, TLC, argentation, 225
—— rat, adrenal, circadian cycle, 181
—— rat, fatty acid comp, circadian cycle, 181
—— rat liver and hepatoma, effect of cyclopropene acids on octadecenoate isomers, 232
—— rat liver and hepatoma, FA comp, effect of cyclopropene acids, 232
Cholestyramine, effect on cholesterol and coprostanol, rat feces, 217
Cholic acid, binding to various fibers, 982
—— effect on cholesterol uptake, rat intestine, 239
—— in hypercholesterolemic rat, 627
—— prep of liposomes, 898
Cholic acid-3-sulfate, HPLC, 908
Choline oxidase, rat liver mitochondria, 540
Cholinephospholipids, TLC, 161
Cholinephosphotransferase, inhibition, dimethylaminoethyl p-chlorophenoxyacetate, 161
—— rat liver microsomes, 161
Cholylglycine hydrolase, clostridial, bound lithocholic acid in liver, 966
Chromatography, column, bovine optic nerve lipids, 679
—— cardiolipin isolation, ox heart, 253
—— cholesterol and hydrocarbons, separation on aluminum oxide, 195
—— cholesteryl oleate, 627
—— 22,25-dideoxyecdysone, 783
—— 22,25-dideoxyecdysone and metabolites, 783
—— dihydroxypalmitates from cutin, 836
—— Florisil, separation of neutral lipids, 110
—— hormones, aquatic fungi, 716
—— linoleic acid autoxidation products, 517
—— lipid classes, sei whale, 18
—— lipid extracts, isolation of dolichol, free and ester, 291
—— lipids of soybean cell suspensions, 504
—— lipids soybean, 497
—— methyl esters purification, 274
—— mouse neuroblastoma lipid, 391
—— neutral lipids, 777
—— phospholipids, silicic acid, 110
—— separation of dolichol and cholesterol, 291
—— separation of PL, 92
—— silicic acid, phospholipid isolation, rat heart mitochondria, 301
—— silicic acid, separation of prostaglandins, 308
—— silicic acid, separation of total lipid, 121
—— silicic acid, *trans* 12, 13-epoxy-9-hydroperoxy-*trans*-10-octadecenoic acid, 246
—— soybean lysophosphatidic acid, 572
—— sterols and steryl esters, 29
—— steryl glycosides, 697
—— vasopressor phospholipid, 468

Chromatography, column, argentation, C_{20}-C_{38} monoenoic methyl esters, 575
Chromatography, column, CM cellulose, lipase isolation, 598
Chromatography, column, gel, lipoproteins, molecular weight, 951
Chromatography, column, gel filtration, separation protein and lipid, 253
Chromatography, column, ion exchange, bile acids, 42
Chromatography, column, LH-20, C_{20}-C_{36} monoenoic methyl esters, 575
Chromatography, column, Sephadex, lipase isolation, 598
Chromatography, column, Sephadex G-50, liposomes, 898
Chromatography, column, Sepharose, liposomes, 943
Chromatography, column, Sepharose 4B, liposomes, 898
Chromatography, column, ultrogel AcA 44, liposomes, 898
Chromatography, gas-liquid, aldehydes and aldesters, 575
—— alditol acetates from gangliosides, 59
—— alpha-tocopherol, 616
—— bile acids, 42
—— 21:5ω3, capillary columns, 24
—— capillary, methyl esters, from rat mitochondrial phospholipids, 301
—— capillary, monobromopalmitate, 85
—— capillary, sphingomyelin fatty acids, 551
—— carbohydrates, 451
—— cholesterol, free and total, pig serum and ovarian follicular fluid, 225
—— *cis-* and *trans-*isomers, dibenzoylethylene, 128
—— cyclic fatty acid, 313
—— derivatives of oils containing cyclopropene acids, 270
—— diester waxes, isopropylidene alkanediols, 829
—— dihydroxypalmitates from cutin, 836
—— 2,5-diphenylfuran, 182
—— diplopterol and tetrahymanol, 692
—— ecdysteroids and conjugates, 783
—— epoxy FA as trimethylsiloxy ethers, 270
—— ethyl esters, Jojoba cotyledon lipids, 203
—— fatty acid methyl esters, 804, 827, 835, 840, 850
—— fatty acid methyl esters, rat kidney, 892
—— ^{14}C-fatty acid methyl esters, preparative, 801
—— fatty acid methyl esters, ovine plasma, 610
—— free fatty acids, 840
—— furanoid fatty acid in methylester, 905
—— HeLa cell alkanols, 344
—— HeLa cell fatty acids, 344
—— (8-^{14}C) n-heptadecane, 110
—— hydrogenolysis products of a furanoid fatty acid, 905
—— hydroxy FA as trimethylsiloxy ethers, 270
—— linoleic acid oxidation products, 517
—— lipid autoxidation products, 415
—— long chain alcohols, 203
—— long chain alcohols, TMS derivatives, 203
—— milk fatty acids, butyl esters, 818
—— pentacyclic triterpenols, 692
—— pentane from lipid peroxidation, 396, 403
—— phenols, long chain cashew nutshell liquid, 525
—— preparative, isolation octadecenoate fractions, 232
—— preparative, labelled rat liver, 446
—— preparative, C_{20}-C_{36}, monoenoic methyl esters, 575
—— preparative C_{20} unsaturates, bovine lens, 190
—— prostaglandin methyl esters, 804
—— pyrrolidides of monoenoic methyl esters, 575
—— quantitation neutral lipids, rat liver and hepatoma, 232
—— quantitation of cholesteryl ester, 181
—— radioactive fatty acid methyl esters, 758
—— radioactive fatty acids, 791, 796
—— squalene, cholesterol, hydrocarbons, 110
—— steroids, neutral and acidic, 605
—— sterols, 427
—— sterols algal, 533
—— sterols, rat feces, 217
—— sterols, yeast, 29
—— steryl acetates, *N. crassa*, 56
—— TMS-bile acid methyl esters, 605, 976
—— TMS-sterols, 658
—— triglycerides, 338
Chromatography, gas-liquid, capillary, fatty acid methyl esters, 835
Chromatography, gas-liquid, fatty acids, 451, 636, 658
—— alcohols, wax esters, TG, glyceryl ethers, whale, 860
—— bovine optic nerve lipids, 679
—— from soybean lecithin, 468
—— mouse embryo cell plasma membrane lipids, 653
—— mouse leukemia cell lipids, 666
—— murine erythroblast PL, 580
—— of chicken uropygial gland, 492
—— of rat liver mitochondria, 540
—— of soybean cell suspensions, 504
—— rat brain, 408
—— rat heart, 438, 459
—— rat tissues, 18:3ω3 deficiency, 6
—— rats fed thermally oxidized oils, 49
—— rat liver, 563
—— rat plasma, eicosatetraynoic acid, 356
—— sei whale, 18
—— sphingomyelin, 551
Chromatography, gas-liquid-mass spectra, lithocholic acid-3α-sulfate, metabolites, 152
—— sterol acetates, 34
Chromatography, gas-liquid-mass spectroscopy, deacylated phospholipid, 468
—— dtmn, erucic acid, rapeseed oils, 283
—— linoleic acid oxidation products, 517
—— lipid autoxidation products, 415
—— methyl oleate decomposition products, 511
—— neuroblastoma antioxidant, 391
—— 21:5ω3, seal oil, 24
—— sterols algal, 533
Chromatography, gas-liquid, fatty acid methyl esters, derivatives, lipids of uropygial gland secretions, 274
—— from cholesteryl esters, perirenal fat, 116
—— from marine sponge, 199
—— from, PE, PC, TG, CE, rat liver and hepatoma, 232
—— from rat adrenal cholesteryl esters, 181
—— from VLDL, LDL, HDL, minipigs serum and intima, 174
—— neutral lipids, temporal gland and adipose tissue, elephant, 195
—— rat tissues, quantitation, 121
Chromatography, gas-liquid, radio, fatty acids of rat hepatocytes, 487
—— tritiated hydrocarbons, 323
Chromatography, HPLC, bile acid conjugates, 971
—— bile acids, 976
—— hormones, aquatic fungi, 716
—— lipid autoxidation products, 415
—— N-oleoyldihydrosphingomyelin, purification, 267
—— prostaglandin methyl esters, 804
—— prostaglandins, 892
—— sulfated bile acids, 908
—— tocopherols, 832
Chromatography, paper, pantetheine-^{3}H, 422
Chromatography, reversed phase, separation by number of carbons, methyl esters, 110
Chromatography, Sephadex column, lithocholic acid-3α-sulfate metabolites, 152
Chromatography, thin-layer, acetylated tetraols from 22, 25-dideoxyecdysone, 783
—— 2-alkyl glycerol, 844
—— alumina, $AgNO_3$ plates, sterols rat feces, 217
—— ^{3}H-arachidonic acid, 768
—— bile acid conjugates, 971
—— bile acid methyl esters, 605
—— bile acid sulfates, 479
—— bile acids, 627
—— bovine optic nerve lipids, 679
—— cerebroside isolation, rat brain lipids, 294
—— 5β-{G-^{3}H} cholestane 3α, 7α-diol, 961
—— cholesterol, isolation rat brain lipids, 294
—— choline-N-$^{13}CH_3$-PC, 92
—— cholinephospholipids, 161
—— column eluant, monitor for dolichol, 291
—— diol diesters, hamster skin, preparative, 829
—— ecdysone metabolism in fat body culture, 783
—— furanoid fatty acid methylester, 905
—— fatty acid methyl esters, 804
—— gangliosides, 59, 824
—— gangliosides rat mammary cells, 451
—— glyceryl mono-olein, preparative, 627
—— HeLa cell lipids, 344
—— (8-^{14}C) n-heptadecane, 110
—— hormones, aquatic fungi, 716
—— hydrogenolysis products of a furanoid fatty acid, 905
—— isolation of FFA, from bile and digesta lipids, 158
—— isolation, PC and LPC, pig serum and ovarian follicular fluid, 225
—— LCAT incubation lipids, 619
—— linoleic acid oxidation products, 517
—— lipoxidase reaction mixtures, 636
—— lithocholic acid-lysine conjugates, 966
—— lithocholic acid-3α-sulfate, 152
—— lysophosphatidic acids, 572
—— mouse tissue lipid comp, 464
—— PC, PE, cardiolipin, isolation, from rat heart mitochondria, 301
—— phenols, long chain, cashew nutshell liquid, 525
—— phospholipase A_2 reaction products, 840
—— phospholipids, rat liver and hepatoma, cyclopropene fed rats, 232
—— phospholipids, rat liver mitochondria, 540
—— PL fatty acid methyl esters, 804
—— PL murine erythroblasts in viral infection, 580
—— plasmalogen, alkylacyl glycerophospholipids, 165
—— polar lipids, skin fibroblasts, 758
—— prenyl pyrophosphates, 352
—— preparative, monobromopalmitate, 85
—— prostaglandin F, 408

—— radioactive fatty acids, 791, 796
—— reactional, anal of ethanolamine plasmalogens rat brain, 294
—— separation methyl esters and cyclopropene derivatives for GLC anal, 270
—— separation of cholesterol and bile acids, 134
—— separation of PC and LPC, from bile and digesta, 158
—— soybean lecithin, 468
—— steroids, bile acid precursors, 961
—— steroids, neutral and acidic, 605
—— sterols and steryl acetates, *N. crassa*, 56
—— sterols, rat feces, 217
—— steryl esters, *B. napus*, 658
—— steryl glucosides, 730
—— steryl glycosides, 697
—— terpenols, 352
—— tocopherol, phytol, BHT, TBHQ, BHA, 137
—— total lipid, perirenal fat, 116
—— total lipids, rat heart cells, 809
—— *trans*, 12, 13-epoxy-9-hydroperoxy-*trans*-10-octadecenoic acid, and methyl ester, 246
—— triglyceride lipase reaction products, 598
—— two-dimensional, rat brain phospholipids, 294
—— zymosterol, ergosterol and esters, 29
Chromatography, thin-layer, alumina, steroids, bile acid precursors, 961
Chromatography, thin-layer, argentation, alumima, sterols, rat feces, 217
—— cholesteryl esters, product of LCAT reaction, 225
—— fatty acids, sphingomyelin, 551
—— furanoid fatty acid methylester, 905
—— isolation of linolelaidate, 103
—— methyl esters, 110
—— methyl esters. isolation trienoic esters, 116
—— rumen sterols, 818
—— sei whale, 18
—— separation of methyl esters, 270
—— sterols, 692
—— unsaturated FA, from marine sponge, 199
Chromatography, thin-layer, lipid, autoxidation products, 415
—— classes, 66, 673, 850, 873, 892
—— classes, PL mouse leukemia cells, 666
—— classes, sea urchin eggs, 827
—— classes, sei whale, 18
—— rat brain, 408
—— rat heart, 459
Chromatography, thin-layer, lipids, Jojoba cotyledon, 203
—— mouse embryo cell plasma membrane, 653
—— of soybean cell suspensions, 504
—— rat heart, 438
—— soybean, 497
Chromatography, thin-layer, neutral, and PL of rat renal medulla, 167
—— lipid classes, 905
—— lipids, 777
—— lipids, elephant temporal gland, 195
—— lipids, phospholipids, 110
—— lipids, rat tissues, 121
—— lipids, skin fibroblasts, 758
—— lipids, whale tissues, 860
Chromatography, thin-layer-radio, lipids from soybean cell suspensions, 504
Chyle lipids, rat, 338
Chylomicronemia, familial, apolipoprotein C-II, 903
Chylomicrons, transport of diacylalkylglycerol, 844
Ciconiiformes, comp uropygial gland secretions, four species, 274
Circadian cycle, rat, adrenal cholesteryl ester, 181
—— plasma corticosterone, 181
Clofibrate, palmitate and erucate metabolism, 487
Cockroach, cuticular hydrocarbons, 323
—— ecdysone metabolism in fat body culture, 783
—— hydrocarbon biosynthesis, 323
—— synthesis of cholesterol from plant sterols, 742
Cockroach, fat body, in organ culture assay for molting hormone, 259
Cockroach, leg, regeneration use in study of inhibitors and activators of molting hormone, 259
Cod, smoked, peroxide value, 147
Coenzyme A, mouse liver, dtmn, 446
Cold stress, rat, and docosenoic acids, 459
Colipase, rat, protective effect of bile lipoprotein complex, 211
Collagen, cross linking in presence of oxidizing lipid, 755
Colorectal cancer, bile acids, dietary fat, 976
Confused fluorbeetle, synthesis of cholesterol from plant sterols, 742
Coprostanol, content rat feces, effect of diet, 217
Corn earworm, synthesis of cholesterol from plant sterols, 742
Corn oil, thermally oxidized, distillable ethyl esters, 49
Coronary heart disease, atherosclerosis, review, 914
—— HDL, symposium introduction, 911
Corticosterone, plasma, rat, circadian cycle, 181
Cotyledons, Jojoba, fatty acid elongation and de novo synthesis, 203
—— wax biosynthesis, 203
Cows, feeding of protected cholesterol, milk secretion, 818
Crepenynic acid, isolation, *Crepis alpina* seed, 103
—— reduction to linoleate-12(13)-^{3}H, with tritiated H_2O, 103
Crepis alpina seed, isolation of crepenynic acid (*cis*-9-octadecen-12-ynoic acid), 103
Cross linking, collagen in presence of oxidizing lipid, 755
Crystalization, low temperature, conc of minor constituents in rapeseed oil, 658
Cuticular hydrocarbons, cockroach, 323
Cutin, papaya, optical retention of dihydroxypalmitates, 836
Cutin, tomato, optical retention of dihydroxypalmitates, 836
Cyanide, effect on intestinal absorption of 20:4, 768
Cyanolipids, ^{13}C nuclear magnetic resonance spectra, 514
Cyclopamine, teratogenicity in sheep, cattle, goats, rabbits, rats, hamsters, mice, 708
Cyclopia, teratogenicity of cyclopamine in sheep, 708
Cyclopropane fatty acids, cell production, bacteria, yeast, 878
Cyclopropene fatty acids, comp in selected members of species *Bombacaceae, Malvaceae,* and *Sterculiaceae,* 270
—— derivatives, GLC, MS, 270
—— dtmn of content, hydrogen bromide titration, 270
—— dietary, effect on octadecenoate isomers, rat liver and hepatoma, 232
—— inhibition of monoene elongation, 232
Cyclopropenes, derivatization, for GLC anal, 270
Cyclopsine, teratogenic alkaloid in *Veratrum californicum,* 708
Cysteine-FeCl$_3$ catalyst, formation of *trans* 12, 13-epoxy-9-hydroperoxy-*trans*-10-octadecenoic acid, 246

D

Dealkylation, 24-ethyl sterols by a ciliated protozoan, 692
Decanal, oleate hydroperoxides, 511
Decyl p-toluenesulfonate, hypercholesterolemia in pigeon, 644
7,22-bis Dehydrocholesterol, in a ciliated protozoan, 692
Dehydro-oogoniols, hormones, aquatic fungi, 716
Densitometry, TLC, rat renal medulla lipids, quantitation, 167
11-Deoxojervine, see Cyclopamine
Deoxycholic acid-3-sulfate, HPLC, 908
22,-Deoxyecdysone, TLC, NMR, mass spectra, 783
Desaturase, Δ^6, effect of catecholamines and β-blocking agents, 649
—— mouse leukemia cells, 666
Δ^9 Desaturase, assay, mouse liver and hepatoma, 289
Desaturase, yeast mutant deficient in, 878
Desaturase, stearoyl CoA, liver and adipose, cardiomyopathic hamster, 622
Desmosterol, cholesterol esterification in rat brain, 777
—— in synthesis of cholesterol from plant sterols, 742
Detergents, effect on cholesterol esterification, 777
Dextran, loss from liposomes, 898
Dextrose, effect on intestinal absorption of 20:4, 768
Di(2-ethylhexyl) phthalate, see Phthalate esters
Diacylalkylglycerols, transport in chylomicrons and VLDL, 844
Dialysis, of gangliosides, 824
Dialysis, equilibrium, bile salt distribution aqueous and micellar phase, 187
Diatom, *Nitzschia alba,* identification of 24-methylene cholesterol, 34
Dibenzoylethylene, formation, oxidation of diphenylfuran, 128
—— GLC of *cis*- and *trans* isomers, 128
Dichloroisoproterenol, effect on linoleate desaturation, 649
21,25-Dideoxyecdysone, metabolism, cockroach fat body culture, 783
Diester wax, hamster skin, 1,2-alkanediols, branched, 829
Diesters, alkanediols, chicken uropygial gland, 492
Diet, atherosclerosis, 360
—— arteriosclerosis, 366, 370, 373
Dietary fat, bile acid production in the rat, 976
Digestive tract, rat, 18:3 deficiency, phospholipid comp, 6
Dihomo-γ-linolenic acid, incorporation into rat tissue lipids, 801
Dihydrosphingomyelin-cholesterol membranes, glycerol permeability, effect of cholesterol, 267
Dihydrosphingomyelin, N-Oleoyl, prep, purification by high performance liquid chromatography, 267
Dihydroxypalmitates, cutin, optical rotation, 836

1,25-Dihydroxyvitamin D_3, interaction with chick intestinal mucosa, 723
1,2-Dilauroyl-3-oleoyl-sn-glycerol, absorption, rat, 338
5,7-Dimethyltocol, internal standard for GLC, 616
Dinitrophenol, effect on intestinal absorption of 20:4, 768
1,3-Dioctadecenoyl-2-hexadecylglycerol, transport in chylomicrons and VLDL, 844
N,N-Diphenyl-p-diphenylenediamine, pentane production in rat, 403
2,5-Diphenylfuran, GLC, 128
—— oxidation to dibenzoylethylene, 128
—— silicon and titanium dioxide catalyzed oxidation, 128
Diphosphatidylglycerol, rat brain, content, 294
Diphosphatidylglycerol ox heart, isolation, chromatography column, 253
Diphosphatidylglycerol, peroxidized, covalent binding to protein, model system, 253
Diplopterol, inhibition of synthesis by sterols, 692
Δ^{11}-Docosamonoenoic acid, *M. tuberculosis,* 575
Docosenoic acid, rapeseed oils, mass fragmentographic dtmn, 283
—— cold stress, rat, 459
—— rat heart lipids, 459
Docosatetraenoic acid, formation from 20:3ω6, 801
—— rat renal medulla papillae, 892
Dolichol, extraction, isolation, quantitation, various human tissues, 291
—— gravimetric dtmn, 291
Dolichol esters, extraction, isolation, quantitation, various human tissues, 291

E

EAE, see Experimental allergic encephalomyelitis
E.C. 1.1.1.50, see 3α-Hydroxysteroid: NAD^+ oxidoreductase,
EC 3.1.1.13, see cholesterol esterifying enzyme
EC 3.1.1.3, see triacylglycerol acylhydrolase
EC 3.1.1.5, see lysophospholipase, 898
EC 3.1.1.4, Phosphatide 2-acylhydrolase, see Phospholipase A_2
Ecdysome, review, 736
Ecdysteroidal conjugates, cockroach fat body culture, metabolism, 783
Ecdysteroids, cockroach fat body culture, metabolism, 783
—— cuticle formation in cockroach, 742
—— effect on molting hormone, cockroach leg regenerate assay system, 259
EFA, see essential fatty acids
EFA deficient rat, adrenal cholesteryl esters, 181
—— plasma corticosterone, 181
Egg, yolk, incorporation of linoleate and linoelaidate, 103
Eggs, sea urchin, fatty acid comp, fertilized, unfertilized, 827
Ehrlich ascites carcinoma, murine, hypertriglyceridemia, dietary fat, 887
Ehrlich ascites tumor cells, incorporation of elaidic acid, 850
Eicosatetraynoic acid, dietary, and fatty acid metabolism, 356
—— rat liver fatty acid, 356
8,11,14-Eicosatrienoic acid, incorporation into rat tissue lipids, 801
Elaidic acid, incorporation into tumor lipids, 850
Elaidyl-CoA, acylation of lysophosphatidic acid, 329
Electron microscopy, lipoprotein HDL_{2b}, liposomes, 943
Electrophoresis, lipoproteins, cebus monkey, 88
Electrophoresis, gel, liposomes, 898
Electrophoresis, gradient gel, lipoprotein HDL_{2b}, liposomes, 943
Elephant adipose tissue, FA comp, TG, 195
Elephant temporal gland, neutral lipids, comp, 195
Elongation, fatty acids, mouse leukemia cells, 666
Embryo cells, mouse, plasma membrane PL, cholesterol, fatty acids, 653
Encephalomyelitis, rat, 408
—— essential fatty acid deficiency, 408
—— prostaglandin synthesis, 408
Encephalomyelitis, experimental allergic, effect of aspirin and/or EFA-deficiency in rats, 867
Enzyme markers, subcellular fractions by centrifugation, 961
Equilibrium dialysis, bile salt distribution aqueous and micellar phase, 187
Epicoprostanol, occurrence, rat feces, 217
Epidemiology, HDL and atherosclerosis, review, 914
—— HDL and coronary heart disease, 911
Epinephrine, effect on linoleate desaturation, 649
Epoxy fatty acids, derivatization, for GLC anal. 270
—— derivatives GLC, IR, 270
***trans*-12, 13-Epoxy-9-hydroperoxy-*trans*-10-octadecenoic acid,** formation from 13-L-hydroperoxy-*cis*-9, *trans*-11-octadecenoic acid, 246
Epoxyoctadecenoates, linoleic acid autoxidation in monolayers, 517
Ergosterol, algal cell cultures, 533
—— TLC, 29
—— yeast subcellular fractions, 730
Ergosterol myristate, TLC, 29
Erucate, clofibrate effect on metabolism, 487
Erucic acid, anal, comparison of methods, 283
—— methyl ester, mass spectra, 283
—— myocardial lesions, 438
—— rapeseed oils, mass fragmentographic dtmn, 283
—— rat cardiac free fatty acids, 438
—— rat cardiac triglycerides, 438
Erythroblasts, mouse, cholesterol and PL in viral infection, 580
Erythrocyte ghosts, autoxidation, oxygen uptake, 137
—— model system, autoxidation, 137
—— prep of, 137
Erythrocyte rat, 18:3ω3 deficient, fatty acid comp, 6
Erythrocytes, fatty acid profile and dietary fat, 551
—— ghosts, model system, autoxidation, 137
Escherichia coli 30℃ β oxidation/Δ^4 to Δ^{15} *cis*-methyleneoctadecenoates, 878
Essential fatty acids, deficiency, and prostaglandin synthesis, 408
—— ovine total plasma lipids, maternal, fetus, 610
—— prostaglandin production, rat brain, aspirin, 867
—— prostaglandin synthesis, 892
Esterification, fatty acid, in rat hepatocytes, 487
Ethanediol, 1-0-hexadecanoyl [U-^{14}C], synthesis of, 161
Ethanol, effect on cholesterol-bile acid conversion, rat, 134
—— effect on cholesterol, bile acid synthesis, rat, 134
—— ingestion, and dietary fat, 540
—— ingestion, and lipoprotein lipase activity, 433
—— ingestion, and plasma insulin, 433
—— ingestion, and plasma triglycerides, 433
—— ingestion, rat liver mitochondrial lipid, 540
Ethanol toxicity, pentane production, indication of lipid peroxidation, effect of vitamin E, 305
Ethanolamine, plasmalogens, rat brain, anal, reactional 2-dimensional TLC, 294
Ether lipids, transport in chylomicrons and VLDL, 844
Evaporation, selective loss of 14:0 from 14:0 and 16:0 mixtures, 835
Experimental allergic encephalomyelitis, effect of aspirin and/or EFA-deficiency in rats, 867
Extraction, bile acids from bile, 605
—— furanoid fatty acid from latex, 905
—— prostaglandins, 892
—— tissue bile acid, ethanol-ammonium hydroxide, 966
Extraction, lipid, cardiolipin, from model peroxidation system, 253
Extraction, soxhlet, feces, 818
Eye, bovine, optic nerve, PC, PI, PE, PS, SPM, cerebrosides and sulfate, 679

F

Fall armyworm, synthesis of cholesterol from plant sterols, 742
Farnesol, *Neurospora crassa,* 352
Fat body, cockroach, in organ culture assay for molting hormone, 259
Fat, dietary, bile acid production in the rat, 976
—— ethanol ingestion, 540
—— pentane production, rat, 396
—— rat liver mitochondrial lipid, 540
—— sphingolipids of platelets and erythrocytes, 551
Fats, heated, toxic effects, 809
Fatty acid, elongation and de novo synthesis, developing Jojoba seed, 203
—— specificity of rat brain cholesterol esterification, 777
Fatty acid, cyclic, from linolenic acid, 313
Fatty acid elongation, mouse leukemia cells, 666
Fatty acid polyacetylenic, lipid metabolism in the rat, 356
Fatty acid, furanoid, in *H. brasiliensis* latex, 905
Fatty acid profile, adipose, hamster, 622
—— bovine optic nerve PC, PI, PE, PS, SPM, cerebrosides and sulfate, 679
—— CE, FFA, TG, alkoxy glycerides, active and inactive elephant temporal gland, 195
—— chicken uropygial gland wax diesters, 492
—— gangliosides, bovine mammary gland, 59
—— glycosphingolipid, swine erythrocyte, 551
—— hepatic lipids, elaidate, 850
—— human omental triglycerides, 317
—— lipids of soybean cell suspensions, 504
—— mouse embryo cells PE, PC, PS, PI, SPM, 653
—— murine erythroblast PC, PE in viral infection, 580
—— murine tumor lipids, TG, CE, PC, PE, SPM, elaidate, 850

—— L_6 myoblast membrane phospholipids, 334
—— neutral lipids, PC, PE and PS+PI renomedullary, rabbit, 804
—— ovine total plasma lipids, maternal, fetus, 610
—— peanut oil, 459
—— peanut oil, rapeseed oils, 301
—— phospholipids of soybean cotyledons, 497
—— rapeseed oil, 459
—— rapeseed oil steryl esters, 658
—— rat heart mitochondrial PL, rapeseed oil, 301
—— rat heart triglycerides and FFA, 438
—— rat hepatocytes, 487
—— rat liver, arginine deficiency, 563
—— rat liver, eicosatetraynoic acid, 356
—— rat liver mitochondria, 540
—— rat liver, various diets, 75
—— rat plasma, eicosatetraynoic acid, 356
—— rat renal medulla papillae, 892
—— rat tissue lipids, 18:3ω3 deficiency, 6
—— sei whale blubber, liver, muscle TG, PL, 18
—— selected seed oils, species *Bombacaceae, Malvaceae,* and *Sterculiaceae,* 270
—— sphingomyelin, canine erythrocyte, 551
—— sphingomyelin, canine platelet, 551
—— sphingomyelin, swine erythrocyte, 551
—— sea urchin eggs, PL and TG, 827
—— tissue lipids, rats fed oxidized oils, 49
—— total liver lipid, hamster, 622
—— wax esters, TG, ethers, whale jaw, melon, blubber, 860
***trans*-Fatty acids,** acyltransferase specificity, 329
Fatty acids, ^{14}C-acetate incorporation in soybean cell suspensions, 504
—— effect on micelle formation, 187
—— incorporation into mouse leukemia cell lipids, 666
—— lysophosphatidic acids, and vasopressor activity, 572
—— metabolism in insects, 323
—— rat, and 1,2-propanediol, 455
—— rat liver, and protein deficiency, 446
—— rat plasma, and dietary fat, 566
—— vasopressor lysophosphatidic acid, 468
Fatty acids, branched, uropygial gland wax esters, 274
Fatty acids, cyclopropane, cell production, bacteria, yeast, 878
Fatty acids, essential, ovine total plasma lipids, maternal, fetus, 610
—— prostaglandin production, rat brain, aspirin, 867
—— prostaglandin synthesis, 892
Fatty acids, polyunsaturated, metabolism in cultured human skin fibroblasts, 758
Fatty acids, *trans,* incorporation into tumor lipids, 850
—— metabolic effects, 329
Fatty acids, very long chain, *M. tuberculosis,* 575
Fatty alcohol profile, wax esters, whale jaw, melon, blubber, 860
Fecal sterols, cholesterol fed rats, 588
—— rat, coprostanol and cholesterol content, effect of diet, 217
Feces, rat, lipid and sterols, cholesterol feeding, 588
—— small, rat bile acid distribution, effect of cholesterol, 42
Fertilization, effect on FA comp of sea urchin eggs, 827
Fiber, atherogenic effect of protein, 366
—— dietary, bile acid metabolism, 982
—— fecal steroid excretion, 366
—— dietary, and hypercholesterolemia, 366
Fibroblasts, human skin, culture conditions, 758
—— pulse-chase studies, 758
Filipin, membrane perturbation, interaction with sterols, 686
Flaxseed extract, linolenic acid, 313
Free fatty acids, active and inactive elephant temporal gland, content, 195
—— elephant temporal gland, FA comp, 195
Free fatty acids, serum, effect of atherogenic diets, minipigs, 174
Free radicals, indomethacin and lipid peroxidation, 636
Freund's adjuvant, EAE production in rat, 867
Fucosterol, synthesis by *Achlya,* 716
Fungi, aquatic, fucosterol and hormone production in *Achlya,* 716
Furanoic fatty acid, in H. brasiliensis latex, 905

G

Galactosyltransferase, activity, rat villus microsomes, effect of LPC and detergents, 297
Gall bladder, guinea pig, bile acid comp of bile, 961
Gangliosides, behavior on dialysis, 824
—— bovine mammary tissue, synthesis and comp, 59
—— cultured cells from fat mammary carcinoma, 451
—— GLC, alditol acetates and FA, 59
—— isolation from bovine mammary, 56
—— TLC, 59
Geranylgeraniol, *Neurospora crassa,* 352
Geranyllinool, *Neurospora crassa,* 352
Glucose, blood, lipoprotein lipase activity, ethanol ingestion, 433
—— rat plasma, and dietary fat, 566
Glucose [U-^{14}C], metabolism in rat and Fe-deficiency, 473
Glucosyltransferase, tobacco and barley sterylglycosides, 697
Glutathione peroxidase, assay, 396
Sn-Glycerol-1,2-carbonates, synthesis, 557
Sn-Glycerol 1,2-[^{3}H] diacyl, prep phospholipase C, hydrolysis, 161
Glycerol permeability, dihydrosphingomyelin membranes, effect of cholesterol, 267
Glycerylethers, diacyl, transport in chylomicrons and VLDL, 844
—— whale tissues, comp, GLC, TLC, 860
Glycerylphosphate acyltransferase, rat hepatocytes, 487
Glycochenodeoxycholic acid, HPLC, electron impact mass spectrometry, 971
Glycochenodeoxycholic acid-3-sulfate, HPLC, 908
Glycocholic acid, HPLC, electron impact mass spectrometry, 971
Glycocholic acid-3-sulfate, HPLC, 908
Glycodeoxycholic acid, HPLC, electron impact mass spectrometry, 971
Glycodeoxycholic acid-3-sulfate, HPLC, 908
Glycolipids, soybean cell suspensions, 504
—— tobacco and barley, 697
Glycolithocholic acid-3-sulfate, HPLC, 908
Glycosyltransferase, assay, 59
—— stimulation by LPC, steric requirements, 297
Goats, feeding of protected cholesterol, milk secretion, 818
Golgi, bovine mammary gland, glycosyltransferase assay, 59
Golgi, rat liver, isolation of, 161
Guanine, inhibition of LCAT activity *in vitro,* 619
Guinea pig, blood pressure and lysophosaphtidic acids, 572
Guinea pig, adrenal, cholesteryl ester, fatty acids, 116
—— effect of vitamin C on cholesteryl esters, 116
Guinea pig gall bladder, bile acid comp of bile, 961
Guinea pig liver, chenodeoxycholic acid biosynthesis, 961
Guinea pig spinal cord, EAE production in rat, 867

H

Hamster, cardiomyopathic, stearoyl CoA desaturase in adipose and liver, 622
Hamster skin, diester wax, 1,2-alkanediols, branched, 829
Heart disease, coronary, atherosclerosis, review, 914
—— HDL, symposium introduction, 911
Heart, human, dolichol, isolation, quantitation, free and esterified, 291
Heart, rat, cells in culture, thermally-oxidized fats, 809
—— 18:3ω3 deficiency, phospholipid comp, 6
—— effect of oxidized oil distillate on weight and FA comp, 49
—— histological evaluation, effect of oxidized oil, 49
—— lipid, and dietary docosenoic acids, 459
—— lipids, and 1,2-propanediol, 455
Heart, rat, mitochondria, FA comp phospholipids, effect dietary rapeseed oil, 301
Heated fats, toxic effects, 809
HeLa cells, alkanols, 344
—— growth inhibition, 344
—— pentadecan-2-one, effect on lipid metabolism, 344
—— phospholipids, 344
Hemicellulose, influence of dietary fiber on bile acid metabolism, 982
Hen, egg yolk, incorporation of linoleate and linoelaidate, 103
Δ6,9,12,15,18-Heneicosapentaenoic acid, GLC, capillary columns, 24
—— in various marine organisms, 24
—— mass spectra, pyrrolidide derivative, 24
Heneicosapentaenoic acid, occurrence in marine organisms, 24
Hepatic synthesis, TG, cholesterol, squalene, effect of phthalate esters, 66
Hepatocytes, rat, fatty acid metabolism, 487
Hepatoma, rat, incorporation of octadecenoate isomers, PC and PE, 75
Hepatoma SS1K, microsomal Δ9 desaturase activity, 289
Hepatoma 7288ctc, effect of cyclopropene acids, on octadecenoate isomers, of PE, PC, TG, CE, 232
Heptadecane, dietary, absorption and metabolism in rat, 110

—— oxidation to heptadecanoic acid and CO_2, rat, 110
—— storage in carcas, rat, 110
n-Heptadecane (8-^{14}C), GLC, TLC, 110
Heptadecanoic acid, rat, incorporation, neutral and phospholipids, 110
—— rat, desaturation, 110
Herring, dried, peroxide value, 147
Δ5,9-Hexacosadienoic acid, marine sponge, identification in, 199
Δ7 and Δ9 Hexacosamonoenoic acid, *M. tuberculosis,* 575
Δ17-Hexacosenoic acid, marine sponges, identification in, 199
1,2-Hexadecanediol, 15-methyl, hamster diester wax, 829
1-O-Hexadecanoyl [U-^{14}C] ethanediol, synthesis of, 161
Histidine analogue, 4-methyl imidazole, autoxidation, 1
Histology, rat, in animals fed thermally oxidized oils, 49
HMG-CoA reductase, inhibition by oxygenated sterols in cell culture, 704
Hordeum vulgara, see Barley
Hormone, molting, organ culture assay, cockroach leg regenerates, 259
Hormone, plant, synthesis from fucosterol in *Achlya,* 716
Hormones, insect, review, 736
Human adrenals, dolichol, isolation, quantitation, free and esterified, 291
Human heart, dolichol, isolation, quantitation, free and esterified, 291
Human intestine, microflora, metabolism, lithocholic acid-3α-sulfate, 152
Human kidney, dolichol, isolation, quantitation, free and esterified, 291
Human liver, dolichol, isolation, quantitation, free and esterified, 291
Human lung, dolichol, isolation, quantitation, free and esterified, 291
Human omental tissue, lipids, 317
Human pancreas, dolichol, isolation, quantitation, free and esterified, 291
Human plasma, alpha-tocopherol by GLC, 616
Human platelets, alpha-tocopherol by GLC, 616
Human prostate, dolichol, isolation, quantitation, free and esterified, 291
Human spleen, dolichol, isolation, quantitation, free and esterified, 291
Human testes, dolichol, isolation, quantitation, free and esterified, 291
—— prostaglandin, synthesis and turnover, microsomes, 308
Human thyroid, dolichol, isolation, quantitation, free and esterified, 291
HPLC, see chromatography, HPLC
Hydrazine, use in partial reduction of double bonds, 246
Hydrocarbons, biosynthesis in insects, 323
—— GLC, TLC, 110
—— separation from cholesterol, aluminum oxide column, 195
Hydrogen belts, membranes, studies, glycerol permeability, dihydrosphingomyelin-cholesterol membranes, 267
Hydrogenated safflower oil, 18:1 isomers, in hepatoma PC and PE, 75
Hydrolysis, PC, regiospecific, immobilized phospholipase A_2, 840
Hydroperoxide, linoleic acid, prep, 517
Hydroperoxides, oleate, decomposition, 511
—— secondary products, 415
13-Hydroperoxy-linoleic acid, proposed pathway, formation of oxygenated epoxy FA from, 246
13-L-Hydroperoxy-*cis*-9, *trans*-11-Octadecenoic acid, reaction products soybean extract of cysteine-$FeCl_3$ catalysis, 246
3β-Hydroxy-5α-cholestan-6-one, inhibition of cholesterol biosynthesis, 704
Hydroxy fatty acids, derivatives, GLC, NMR, IR, MS, 270
3β-Hydroxycholestane-5α,6α-epoxide, inhibition of cholesterol biosynthesis, 704
7β-Hydroxycholesterol, inhibition of cholesterol biosynthesis, 704
Hydroxyepoxyoctadecenoic acid, linoleic acid autoxidation products, 517
ω-Hydroxypalmitate hydroxylase, cutin synthesis, 836
3α-Hydroxysteroid dehydrogenase, bile acid assay, 976
3α-Hydroxysteroid: NAD$^+$ oxidoreductase, bile acid assay, 976
Hypercholesterolemia, dietary fiber, 366
—— dietary protein, 360
—— in the rat, 627
Hyperketonemia, rat, and dietary fat, 566
Hyperlipidemia, arteriosclerosis, 375
—— HDL apo A-I and apo A-II levels, 951
—— neural stimulation, 380
—— NIH phenotypes, HDL apo A-I and A-II levels, 951
Hypertension, lysophosphatidic acids, rat, rabbit, cat, guinea pig, 572
Hypertriglyceridemia, Ehrlich ascites carcinoma in mice, 887
—— lipoprotein VLDL apo C-II, 933
Hypocholesterolemic agents, arylsulfonate esters, 627
Hypotension, lysophosphatidic acids, 572
Hypoxanthine, inhibition of LCAT activity in vitro, 619

I

Ignosterol, yeast subcellular fractions, 730
Ileum, rat, cholesterol uptake, 239
Imidazole, 4-methyl, autoxidation, 1
Immunoassay, radio, lipoprotein, apo C-II, apo C-III, 933
Immunodiffusion, radial, quantitation of HDL apo A-I and A-II, 926
Indomethacin, inhibition, microsomal prostaglandin biosynthesis, human testes, 308
—— lipid peroxidation, and chemiluminescense, 636
Infarction, myocardial, coronary thrombosis, 378
Insect hormones, review, 736
Insect pheromones, review, 736
Insects, hydrocarbon biosynthesis, 323
Insects, phytophagous, synthesis of cholesterol from plant sterols, 742
Insulin, plasma, and ethanol ingestion, 433
Intestinal lumen, absorption of biliary lipids, 796
Intestinal mucosa, absorption of biliary lipids, 796
Intestine, chick, interaction with 1,25-dihydroxyvitamin D_3, 723
Intestine, human, microflora, metabolism, lithocholic acid-3α-sulfate, 152
Intestine, large, rat, bile acid distribution, effect of cholesterol, 42
Intestine, rat, arachidonic acid absorption, 768
—— contents, stabalization, pancreatic lipase and colipase, 211
—— site of cholesterol absorption, 99
—— transport of diacylalkylglycerol, 844
Intestine, rat, everted sacs, cholesterol uptake, 239
Intestine, small, chick, hydrolysis, biliary phospholipids, 158
Intestine, small, rat, bile acid distribution, effect of cholesterol, 42
—— cholesterol uptake, kinetics and thermodynamics, 239
Intima lipoproteins, minipig, effect of diet, 174
Iron, deficiency and lipogenesis in rat, 473
Isopentenoids, review, 736
1,2-O-Isopropylidene-sn-glycerol, synthesis, 557
Isoproterenol, effect on linoleate desaturation, 649

J

Jaw, whale, wax esters, TG, ethers, fatty acid, alcohol profile, 860
Jejunum, proximal, rat, cholesterol uptake, 239
Jervine, teratogenic alkaloid in *Veratrum californicum,* 708
Jojoba seed, developing, fatty acid, elongation and de novo synthesis, 203
—— wax biosynthesis, 203
Juvabione, review, 736
Juvenile hormone, review, 736

K

Keolreuteria paniculata, see Sapindaceae
Ketogenesis, rat liver, 566
Ketones, rat plasma, and dietary triglycerides, 566
Kidney, human, dolichol, isolation, quantitation, free and esterified, 291
Kidney, rat, 18:3ω3 deficiency, phospholipid comp, 6
—— effect of gestation, DNA and protein content, 167
—— effect of gestation on lipid comp, 167
—— effect of oxidized oil distillate on weight and FA comp, 49
—— histological evaluation, effect of oxidized oil, 49
—— prostaglandin synthesis, EFA-deficiency, 892
Kinetics, cholesterol uptake, rat small intestine, 239

L

Lamb, fetal, plasma total lipid fatty acids, 610
Lambs, teratogenicity of cyclopamine, 708
Latex, furanoid fatty acid TLC, GLC, MS, NMR, 905
Lauric acid, metabolism, rat, 356
LCAT, in rat, influence of purines in vitro, 619
—— pig serum and ovarian follicular fluid, proposed reaction mechanism, 225
—— pig serum and ovarian follicular fluid, stability on storage, 225

LCAT, assay, serum and ovarian follicular fluid, pig, 225
Lecithin, soybean, vasopressor activity, 468
Lecithin-cholesterol acyltransferase, in rat, influence of purines *in vitro*, 619
Lecithin: cholesterol acyltransferase (EC 2.3.1.43), see LCAT
Leg, cockroach, regeneration use in study of inhibitors and activators of molting hormone, 259
Lens, bovine, C_{20} unsaturated FA, identification, mass spectra, 190
Leucophaea maderae, see cockroach
Leukemia cells, L1210, FA incorporation into lipid classes, 666
Lignin, influence of dietary fiber on bile acid metabolism, 982
Lindlar catalyst, reduction of *cis*-9-octadecen-12-ynoic acid to 18:2ω6, 103
Linoelaidate, incorporation, egg yolk lipids, 103
Linoelaidate, prep, from *cis, cis* 18:2ω6, 103
Linoleate, autoxidation, effect of 4-methyl imidazole, 1
—— incorporation, egg yolk lipids, 103
—— ^{14}C incorporation and modification in mouse leukemia cells, 666
—— isomerization tolinoelaidate, nitrous acid, 103
—— methyl, autoxidation, 415
Linoleic acid, desaturation, effect of catecholamines and β-blocking agents, 649
—— 13-hydroperoxy, proposed pathway, formation of oxygenated epoxy FA from, 246
—— metabolism in cultured human skin fibroblasts, 758
—— transport across ovine placenta, 610
Linoleic acid hydroperoxide, prep, 517
Linoleate-12(13)-^{3}H, methyl and ethyl esters, prep. from crepenynic acid, 103
Linolenic acid, deficiency, rat, 6
—— effect on intestinal absorption of 20:4, 768
—— metabolism in cultured human skin fibroblasts, 758
—— oxidation product, 313
—— prostaglandin analog from, 313
—— reaction with flaxseed extract, 313
Linolenic acid deficiency, rat, tissue acid patterns, 6
Linoleyl p-toluenesulfonate, cholesterol excretion in the rat, 627
—— hypercholesterolemia in pigeon, 644
Linum usitatissimum, see flaxseed
Lipase, *Rhizopus arrhizus,* hydrolysis diachyglycerophospholipids, 165
—— triglyceride, acid, bovine thyroid, 598
Lipase, lipoprotein, activation by apo C-II, inhibition by apo C-III, 933
Lipid, dietary, and ethanol ingestion, 433
—— rat plasma, 380
Lipid composition, control of cellular differentiation, 334
—— L_6 myoblast plasma membrane, 334
Lipid metabolism, HeLa cells, effect of pentadecan-2-one, 344
Lipid oxidation, enhancement by 4-methyl imidazole, 1
—— model system with 4-methyl imidazole, 1
Lipid peroxidation, in acute ethanol toxicity, effect of vitamin E status, 305
—— indomethacin, rat liver microsomes, 636
Lipids, human omental tissue, 317
—— neuroblastoma cells, 383
—— soybean cell suspensions, 504
Lipogenesis, Fe-deficient rat, 473
Lipoprotein, plasma, 375
Lipoprotein, HDL, apo A-I and apo A-II levels in hyperlipidemia, 951
—— apo C-II and hypertriglyceridemia, 933
—— atherosclerosis, review, 914
—— cholesterol quantitation, 926
—— lipids, measurement, 951
—— review, symposium introduction, 911
—— Tangier disease, apo A-I, apo A-II, 911
—— ultrastructure, review, 920
Lipoprotein, HDL_c, apo A-I and apo A-II levels in hyperlipidemia, 951
—— lipid comp, molecular parameters, models, 920
Lipoprotein HDL_{2b}, incubation with liposomes, 943
Lipoprotein lipase, activation by apo C-II, inhibition by apo C-III, 933
—— activity and ethanol intake, 433
Lipoprotein, VLDL, apo C-II hypertriglyceridemia, 933
—— secretion in tumor bearing mice, 887
—— symposium introduction, apo C-I, II, III, 911
Lipoproteins, HDL, minipigs, effect of diet, 174
—— serum, plant sterols, 427
—— transport of diacylalkylglycerol, 844
Lipoproteins, alpha, see lipoproteins, HDL
Lipoproteins, apo, A-I and A-II levels in hyperlipidemia, 951
Lipoproteins, HDL, cebus monkey, β-carotene, marker, 88
—— minipig, fatty acid comp, neutral, and phospholipids, 174
—— minipigs, intima, effect of diet, 174
—— phospholipid, TG and CE fatty acids, control and rapeseed fed, 121
—— quantitation, review, 926
—— rat, effect of phthalate esters, 66
Lipoproteins, intima, minipig, effect of diet, 174
Lipoproteins, LDL, minipig, effect of diet, 174
—— minipigs, fatty acid comp, neutral and phospholipids, 174
—— minipigs, intima, effect of diet, 174
—— phospholipid, TG, CE fatty acids, control and rapeseed fed, 121
—— rat, effect of phthalate esters, 66
Lipoproteins, rat, effect of phthalate esters, 66
—— isolation, VLDL, LDL, HDL, 121
—— phospholipid TG, CE fatty acids, control and rapeseed fed, 121
Lipoproteins, serum, isolation of VLDL, HDL, minipigs, atherogenic diets, 174
—— minipig, effect of diet, 174
Lipoproteins, VLDL, minipig, effect of diet, 174
—— minipig, fatty acid comp, neutral and phospholipids, 174
—— minipig, intima, effect of diet, 174
—— phospholipid, TG, CE fatty acids, control and rapeseed fed, 121
—— rat, effect of phthalate esters, 66
Liposomes, asymmetric distribution LPC, 898
—— dimyristoyl PC, incubation with HDL_{2b}, 943
—— prep, dimyristoyl PC, 943
—— prep, sonication, cholate, 898
Lipoxidase, indomethacin and lipid peroxidation, 636
Lipoxygenase activity, of flaxseed extract, 313
Liquid scintillation, urine, triton X 100, stabilized gel, 110
Lithocholate, free and bound in human liver, 966
Lithocholate sulfate, in human liver, 966
Lithocholic acid-3-sulfate, HPLC, 908
Lithocholic acid-3α-sulfate, GLC-MS, metabolites, 152
—— metabolism, intestinal microflora, 152
—— synthesis from lithocholic acid, 152
N-α-Lithocholyl-1-lysine, synthesis, MS, TLC, IR, 966
N-ε-Lithocholyl-1-lysine, synthesis, MS, TLC, IR, 966
N-α-ε-bis Lithocholyl-1-lysine, synthesis, MS, TLC, IR, 966
Liver, rat, acyl-S-pantetheine, 422
Liver, guinea pig, chenodeoxycholic acid biosynthesis, 961
Liver, hamster, stearoyl CoA desaturase, 622
Liver, human, dolichol, isolation, quantitation, free and esterified, 291
—— free and bound lithocholic acid, 966
I iver microsomes, rat, acyltransferase, 329
Liver mitochondria, rat, peroxidation, 383
Liver, mouse, lymphoma-bearing, lipid comp, 464
—— microsomal Δ9 desaturase activity, 289
Liver, murine, incorporation of elaidic acid, 850
Liver, pigeon, arylsulfonate esters and hypercholesterolemia, 644
Liver, rabbit, effect of phthalate esters on lipid biosynthesis, 673
Liver, rat, bile acid synthesis, effect of ethanol, 134
—— cholesterol content, phthalate esters, 66
—— cholesterol synthesis, effect of ethanol, 134
—— 18:3ω3 deficiency, phospholipid comp, 6
—— dietary heptadecane metabolite lipid distribution, 110
—— effect of cyclopropene acids, on octadecenoate isomers, of PE, PC, TG, CE, 232
—— effect of oxidized oil distillate on weight and FA comp, 49
—— effect of phthalate esters on lipid biosynthesis, 673
—— fatty acid metabolism, eicosatetraynoic acid, 356
—— hepatoma, effect of diet on PE and PC comp, 75
—— histological evaluation, effect of oxidized oil, 49
—— incorporation of 20:3ω6, 801
—— indomethacin and lipid peroxidation, 636
—— linoleate desaturation activity, β-blocking agents, 649
—— lipid and sterols, cholesterol feeding, 588
—— lipid biosynthesis, phthalate esters, 66
—— lipids, and 1,2-propanediol, 455
—— lipogenesis and iron-deficiency, 473
—— mitochondrial lipid, dietary fat and ethanol, 540
—— plant sterols, 427
—— small, rat bile acid distribution, effect of cholesterol, 42
—— weight, effect of phthalate esters, 66
Liver, sei whale, TG, PE, PC, FFA, comp, 18
Loxodonta africana, see elephant, 195
Lung, human, dolichol, isolation, quantitation, free and esterified, 291
Lung, rat, 18:3ω3 deficiency, phospholipid comp, 6
Lymphomas mouse, liver lipid comp, 464
—— thymus lipid comp, 464
Lysine conjugates, lithocholic acid, human liver, 966
Lysophosphatidic acid, soybean, vasopressor activity, 468

—— blood pressure, 572
—— soybean, prep, 572
Lysophosphatidylcholine, hydrolysis of vesicles by lysophospholipase, 898
Lysophosphoslipase, hydrolysis of LPC in single bilayer vesicles, 898

M

Macrolides, polyene, membrane perturbation, interaction with sterols, 686
Malvalic acid, content of selected seed oils, GLC anal, 270
—— in *Sterculia foetida* oil, content, 232
Mammary carcinoma, rat, cell culture, 451
Mammary gland, mouse, synthesis of phospho- and neutral glycerides, 95
Man, bile, HPLC, electron impact mass spectrometry, 971
Man, liver, free and bound lithocholic acid, 966
Man, plasma, hypertriglyceridemia VLDL, apo C-II, 933
—— lipoprotein HDL_{2b} incubation with liposomes, 943
Man, skin, polyenoic acid metabolism in cultured fibroblasts, 758
Marine sponge, characterization of unsaturated fatty acids, 199
Melon, whale, wax esters, TG, ethers, fatty acid, alcohol profile, 860
Membrane, hydrogen belts, studies, glycerol permeability, dihydrosphingomyelin-cholesterol membranes, 267
Membrane lipid, L_α myoblast plasma, 334
Membrane perturbation, by sterols in a ciliated protozoan, 692
—— polyene macrolide antibiotics, 686
Membrane, plasma, mouse embryo cells, 3T3, SV3T3, PL, FA, 653
Membranes, autoxidation in model systems, 517
—— peroxidation, 383
Membranes, dihydrosphingomyelin-cholesterol, glycerol permeability, effect of cholesterol, 267
Metabolism, fatty acids, and eicosatetraynoic acid, 356
Methionine, ^{14}C-methyl, labeling of yeast sterols, 730
2-Methyl cardol, dtmn, cashew nutshell liquid, 525
Methyl ester, branched chain, mass spectra, 274
Methyl esters, formation from TG and monoester waxes, uropygial gland secretions, 274
—— phospholipids, rat heart mitochondria, capillary column GLC, 301
—— prep, for GLC anal, oils containing cyclopropene acids, 270
24-Methylene cholesterol, in diatom, *Nitzschia alba*, 34
Mice, Ehrlic ascites carcinoma, hypertriglyceridemia, dietary fat, 887
Mice, tumor, hypertriglyceridemia, dietary fat, 887
Mice, tumor bearing, incorporation of eliadic acid, 850
Mice, plasma, hypertriglyceridemia in tumor bearing animals, 887
Micelles, effect of amphiphiles on formation, 187
Microcolumns, immobilized phospholipase A_2, 840
—— potassium methoxide on celite, transmethylation, 835
Microflora, human intestine, formation of cholenates, 152
—— human intestine, metabolism, lethocholic acid-3α-sulfate, 152
Micropŏthalmia, teratogenicity of cyclopamine in sheep, 708
Microsomal fatty acid synthetase, protein deficiency, 446
Microsomes, mouse mammary, synthesis of DG and TG, 95
—— rat liver, acyl-S-pantetheine, 422
—— rat liver, cholinephosphotransferase inhibition, 161
—— rat liver, fatty acids and protein deficiency, 446
—— rat liver, plant sterols, 427
Microsomes, rat liver, acyltransferase, 329
—— isolation of, 161
Microsomes, rat villi, stimulation of glycosyltransferase, in vitro, by LPC, 297
Milk, goats, cows, feeding of protected cholesterol, 818
Minicolumns, immobilized phospholipase A_2, 840
—— potassium methoxide on celite, transmethylation, 835
Minipigs, atherogenesis, effect of diet, 174
—— intima, lipoprotein conc, 174
—— serum lipid levels, effect of diet, 174
Mitochondria, rat liver, dietary fat and ethanol, 540
—— rat liver, plant sterols, 427
Mitochondria, rat heart, FA comp phospholipids, effect dietary rapeseed oil, 301
—— isolation, rapeseed oil fed rats, 301
Mitochondria, rat liver, peroxidation, 383
Models, cholesterol-phospholipid bilayers, 594
Molting hormone, organ culture assay, cockroach leg regenerates, 259
Monkey, cebus, HDL comp, 88
Monoglycerides, effect on micelle formation, 187
Monolayers, fatty acids, on silica gel, 517
Monosulfates, bile acid, synthesis, 479
Monounsaturated fatty acids, metabolism, rat, 356
Morris minimal deviation hepatoma, see hepatoma 7289ctc
Mouse embryo cells, plasma membrane PL, cholesterol, fatty acids, 653
Mouse liver, incorporation of elaidic acid, 850
—— microsomal Δ^9 desaturase activity, 289
Mouse lymphomas, tissue lipid comp, 464
Mouse mammary, synthesis of phospho- and neutral glycerides, 95
Mouse neuroblastoma lipid, column chromatography, 391
Muldamine, steroidal alkaloid in *Veratrum californicum*, 708
Muricholic acids, rat, HPLC, GC-MS, 976
Murine erythroblasts, cholesterol and PL in viral infection, 580
Murine spleen, erythroblast lipids in viral infection, 580
Muscle, rat, 18:3ω3 deficiency, phospholipid comp, 6
Muscle, sei whale, TB, phospholipid, comp, 18
Mutant algae, sterols, 533
Mutants, *Neurospora crassa*, 352
Mycobacterium tuberculosis, C_{20}-C_{36} monoenoic methyl esters, 575
Mycobacterium tuberculosis H37Ra, EAE production in rat, 867
Mycoplasma, membrane perturbation by polyene macrolide antibiotics, 686
Myelin, optic nerve, PL and glycolipid comp, fatty acid profiles, 679
Myoblasts, L_6, cellular differentiation, 334
—— plasma membrane lipid, 334
L_6, Myoblasts, plasma membrane lipid, 334
Myocardial infarction, arteriosclerosis, 378
Myocardial lesions, erucic acid, 438
Myristate, ^{14}C incorporation and modification in mouse leukemia cells, 666
Myristic acid, metabolism, rat, 356

N

Neoplastic cells, antioxidant, 383
Nervonic acid, metabolism and dietary fat, 551
Neuroblastoma, antioxidant assay, 383
Neuroblastoma lipid, mouse, column chromatography, 391
Neurospora crassa, albino mutants, 352
—— lipid extraction, 352
—— sterols, TLC, GLS, MS, 56
—— terpenols, 352
—— terpenyl pyrophosphates, 352
Neural stimulation, rat plasma lipid, 380
Neutral lipid, egg yolk, incorporation of linoleate and linoelaidate, 103
Neutral lipids, rat liver and hepatoma, quantitation by GLC, 232
—— rat renal medulla, quantitation, densitometry, 167
Nicotiana tabacum, see Tobacco seedlings
Nirolidol, *Neurospora crassa*, 352
t-Nitrosobutane, radical scavenger, 755
Nitzschia alba, see diatom, 34
Nonanal, oleate hydroperoxides, 511
Nuclear magnetic resonance spectra, see spectra, nuclear magnetic resonance
Nuclei, rat liver, plant sterols, 427
Nystatin, membrane perturbation, interaction with sterols, 686

O

Δ9 Octacosamonocnoic acid, *M. tuberculosis*, 575
Δ5,9,19-Octacosatrienoic acid, marine sponge, identification in, 199
***cis*-9-Octadecen-12-ynoic acid,** isolation, *Crepis alpina* seed, 103
Octadecenoate fraction, isolation, preparative GLC, 232
Octadecenoate isomers, in hepatoma, PC, 75
—— in hepatoma, PE, 75
Octadecenoates, Δ8–Δ14, *cis* and *trans* in rat liver and hepatoma PL, 75
Octadecenoic acid, ***trans*-12,13-epoxy-9-hydroperoxy-*trans*-10,** formation from 13-*L*-hydroperoxy-*cis*-9, *trans*-11-octadecenoic acid, 246
Octadecenoic acid, 13-L-hydroperoxy-*cis*-9, *trans*-11, reaction products, soybean extract or cysteine $FeCl_3$, catalysis, 246
Octanal, oleate hydroperoxides, 511
Octanoate-1-^{14}C, metabolism, rat liver slices, 566
8-[2-(*cis*-pent-2-enyl)-3-oxo-*cis*-cyclopent-4-enyl] Octanoic acid, from linolenic acid, 313
Oilseeds peanut, fatty acid profile, 459
Oilseeds, rape, fatty acid profile, 459
Oilseeds, Sapindaceae, cyanolipid content, 514

Oleate, ^{14}C incorporation and modification in mouse leukemia cells, 666
—— methyl, autoxidation, 415
Oleate hydroperoxides, thermal decomposition, 511
Oleic acid, effect on intestinal absorption of 20:4, 768
Olenyl p-toluenesulfonate, cholesterol excretion in the rat, 627
Oleyl-S-pantetheine, synthesis by rat liver microsomes, 422
—— synthesis, effect of metal ions, 422
Oleyl-CoA, acylation, of lysophosphatidic acid, 329
Olive oil, thermally oxidized, distillable ethyl esters, 49
Omental tissue, human, lipids, 317
Oogoniols, synthesis from fucosterol in *Achlya,* 716
Optic nerve, bovine, PL and glycolipid comp, fatty acid profiles, 679
Organ culture assay, molting hormone, cockroach leg regenerates, 259
Orotic acid, rat liver lipids, 563
Ovarian follicular fluid, pig, cholesterol content, free and total, 225
—— cholesterol esterification, rate of, 225
—— LCAT activity, assay, 225
—— phosphatidylcholine, FA comp and positional distribution, 225
Ovary, rat, 18:3ω3 deficient, fatty acid comp, 6
Ox heart cardiolipin, isolation, chromatography column, 253
Oxygenated sterols, inhibition of HMG-CoA reductase in cell culture, 704
Oxidation, 2,5-diphenylfuran, 128
Oxidation, fatty acids, clofibrate-fed rats, 487
Oxidation oils, rat, nutritional and metabolic studies, 49
Oxidation, thermal, corn and olive oils, 49
Oxidized fats, toxic effects, 809
Oxidized oils, toxicity in rat, histological evaluation, 49
Ozonolysis, dtmn of positional isomers, octadecenoates, rat liver and hepatoma, cyclopropene fed rats, 232
—— elimination of artifacts, 199
—— identification of Δ5,9,19–28:3; Δ5,9–26:2; Δ17–26:1 in marine sponge, 199
Ozonolysis, reductive, C_{20}–C_{36} monoenoic methyl esters, 575

P

Pacific Beaked Whale, see whale
Palmitate, clofibrate effect on metabolism, 487
—— ^{14}C incorporation and modification in mouse leukemia cells, 666
Palmitate-1-^{14}C, metabolism, HeLa cell, 344
—— metabolism, rat liver slices, 566
Palmitic acid, incorporation into swine aorta lipids, 873
—— linoleic acid autoxidation in monolayers, 517
—— transport across ovine placenta, 610
—— uptake by heart cells in culture, 809
Pancreas, human, dolichol, isolation, quantitation, free and esterified, 291
Pancreatic juice, rat, biliary PL hydrolysis, 791
Pancreatic lipase, rat, protective effect of bile lipoprotein complex, 211
Pantetheine-^3H, prep, 422
Papaya cutin, optical retention of dihydroxypalmitates, 836
Papilla, kidney, protaglandin production from 20:3ω6, 804
Papillae, rat renal medulla, prostaglandin synthesis, 892
Paullinia meliaefolia, see Sapindaceae
Peanut oil, dietary, FA comp, phospholipids cardiac mitochondria, 301
—— FA profile, 301
Pectin, influence of dietary fiber on bile acid metabolism, 982
Pentacyclic triterpenols, inhibition of synthesis by sterols, 692
Pentadecan-2-one, HeLa cells, effect on lipid metabolism, 344
Pentane, formed by lipid peroxidation, 396
—— production in rat, 403
—— rat breath, indication of lipid peroxidation, ethanol fed rats, 305
—— selenium, 396
—— vitamin E, 396
Periplaneta americana, see cockroach
Periplaneta fuliginosa, see cockroach
Perirenal fat, TLC, total lipid, 116
Permeability, glycerol, dihydrosphingomyelin membranes, effect of cholesterol, 267
Peroxidation, biological membranes, 383
—— indomethacin, rat liver microsomes, 636
—— inhibition by neuroblastoma antioxidant, 383
—— interaction with histadyl residues, 1
—— lipid, cross linking of collagen, 755
—— model system with 4-methyl imidazole, 1
—— pentane production in rat, 396, 403
—— selenium, 396
—— vitamin E, 396
Peroxidation, lipid, in acute ethanol toxicity, effect of vitamin E status, 305
Peroxidation, model system, reaction of peroxidized cardiolipin with albumin, 253
Peroxide value, colorimetric procedure, comparison to standard method, 147
—— dtmn of, improved method, 147
—— dtmn in lipid extracts, 147
—— use of cadmium iodide complex, 147
Peroxidized cardiolipin, covalent binding to protein, model system, 253
Peroxidized diphosphatidylglycerol, binding to protein, model system, 253
Peroxidized phospholipid, covalent binding to protein, model system, 253
Peroxisomes, clofibrate fed rats, 487
—— rat hepatocytes, 487
PG or PGS, see prostaglandin
PGE, see prostaglandin, 892
PGE_1, see Prostaglandin
PGE_2, see Prostaglandin
Phenols, cashew nutshell liquid, 525
Phenotype, NIH, hyperlipidemias, HDL apo A-I and A-II levels, 951
Pheromones, insect, review, 736
Phoca groenlandicus, see seal, harp, 24
Phosphatidic acid, formation in sarcoplasmic reticulum, phospholipase D hydrolysis, in vitro, 264
—— rat brain, content, 294
Phosphatidylcholine, bovine optic nerve, PL and fatty acid profile, 679
—— chemical synthesis, 1-palmitoyl-2-monobromopalmitoyl, 85
—— dimyristoyl, liposomes, incubation with HDL_{2b}, 943
—— effect on micelle formation, 187
—— FA comp and positional distribution, pig serum and ovarian follicular fluid, 225
—— human omental tissue, 317
—— hydrolysis, *Rhizopus arrhizus* lipase, 165
—— intestinal, hydrolysis, 158
—— isotopic labeling of choline, 92
—— lyso, enantiomeric, stimulation of glycosyltransferase, steric requirements, 297
—— mitochondria, heart, linoleatearachidonate ratio, effect of dietary rapeseed oil, 301
—— regiospecific hybrolysis, immobilized phospholipase A_2, 840
—— soybean cell suspensions, 504
—— soybeans, 497
—— synthesis with monobromopalmitate, 85
—— transesterification potassium methoxide on celite microcolumns, 835
Phosphatidylcholine, rat brain, content, 294
—— heart mitochondria, FA comp, effect dietary rapeseed oil, 301
—— heart mitochondrial positional FA anal, 301
—— hepatoma, effect of diet, 75
—— hepatoma, positional anal, 75
—— liver and hepatoma, effect of cyclopropene acids on octadecenoate isomers, 232
—— liver and hepatoma, FA comp, effect of cyclopropene acids, 232
—— liver mitochondria, 540
—— renal medulla, effect of gestation, 167
Phosphatidylethanolamine, bovine optic nerve, PL and fatty acid profile, 679
—— chemical conversion to PC, 92
—— hepatoma rat, effect of diet, 75
—— human omental tissue, 317
—— hydrolysis, *Rhizopus arrhizus* lipase, 165
—— mitochondria, heart, linoleate-arachidonate ratio, effect dietary rapeseed oil, 301
—— rat heart mitochondria, FA comp, effect dietary rapeseed oil, 301
—— soybeans, 497
Phosphatidylethanolamine, rat, heart mitochondrial, positional FA anal, 301
—— brain content, effect of storage, 294
—— hepatoma, positional anal, 75
—— liver and hepatoma, effect of cyclopropene acids on octadecenoate isomers, 232
—— liver and hepatoma, FA comp, effect of cyclopropene acids, 232
—— liver mitochondria, 540
Phosphatidylinositol, bovine optic nerve, PL and fatty acid profile, 679
—— rat brain, content, 294
—— soybeans, 497
Phosphatidylmethanol, prep, 497
Phosphatidylserine, bovine optic nerve, PL and fatty acid profile, 679
—— human omental tissue, 317

—— rat brain, content, 294
—— rat, renal medulla, effect of gestation, 167
Phospholipase A_2, cholesterol esterification in rat brain, 777
—— hydrolysis of biliary PL, 791
—— immobilized, regiospecific hydrolysis of PC, 840
Phospholipase-D, hydrolysis, effect on calcium uptake, sarcoplasmic reticulum, in vitro, 264
—— isolation from cabbage leaves, 92
—— prep, 497
—— soybean cotyledons, 497
—— use in transphosphatidylation, 92
Phospholipid, egg yolk, incorporation of linoleate and linolelaidate, 103
—— rat liver and arginine deficiency, 563
—— serum of iron-deficient rat, 473
—— soybean, 468
—— vasopressor, identity, 468
Phospholipid, biliary, rat, stabalization, pancreatic lipase and colipase, 211
Phospholipid distribution, in 18:3ω3 deficient rats, 6
Phospholipid, peroxidized, covalent binding to protein, model system, 253
Phospholipid profile, murine erythroblasts in viral infection, 580
—— murine liver, tumor bearing, 850
Phospholipid, serum, effect of atherogenic diets, minipigs, 174
Phospholipids, active and inactive elephant temporal gland, content, 195
—— artefacts in soybean extracts, 497
—— bilayer models with cholesterol, 594
—— biliary, hydrolysis, by phospholipase A_2, 791
—— biliary, intestinal hydrolysis, 158
—— cardiac mitochondria, FA comp, effect of dietary rapeseed oil, 301
—— HeLa cells, 344
—— human omental tissue, 317
—— lipoprotein, fatty acid comp., rapeseed fed rat, 121
—— L_6 myoblasts, differentiated and undifferentiated, 334
—— separation by silicic acid chromatography, 92
—— soybean cell suspensions, 504
—— soybeans, extraction, 497
Phospholipids, rat, and 1,2-propanediol, 455
—— brain, comp, effect of storage, 294
—— hepatic synthesis, effect of phthalate esters, 66
—— liver and hepatoma, isolation by TLC, 232
—— liver mitochondria, 540
—— liver, incorporation of heptadecane metabolites, 110
—— renal medulla, effect of gestation, 167
—— renal medulla, quantitation, densitometry, 167
Phosphorus determination, Vackovsky-Kostetsky-Vasendin procedure, 840
Phthalate esters, effect on lipid biosynthesis and serum cholesterol, 673
Phthalates, effect on lipid synthesis in rat, 66
Pig ovarian follicular fluid, cholesterol content, free and total, 225
—— cholesterol esterification, rate of, 225
—— LCAT activity, assay, 225
—— phosphatidylcholine, FA comp and positional distribution, 225
Pig serum, cholesterol content, free and total, 225
—— cholesterol esterification, rate of, 225
—— LCAT activity, assay, 225
—— phosphatidylcholine, FA comp and positional distribution, 225
Pigeon liver, arylsulfonate esters and hypercholesterolemia, 644
Pigeon, White Carneau, effect of arylsulfonate esters on hypercholesterolemia, 644
Pigment, formation in autoxidizing 18:2 with 4-methyl imidazole, 1
Placenta, ovine, transfer of free 16:0 and 18:2 across, 610
Plant sterols, cholesterol synthesis in insects, 742
Plasma, insulin, and ethanol ingestion, 433
—— lipoprotein, 375
—— triglyceride, and ethanol ingestion, 433
Plasma, human, alpha-tocopherol by GLC, 616
—— hypertriglyceridemia VLDL, apo C-II, 933
—— lipoprotein HDL_{2b} incubation with liposomes, 943
Plasma membrane, mouse embryo cells, 3T3, SV3T3, PL, FA, 653
Plasma membrane lipid, L_6 myoblasts, differentiated and undifferentiated, 334
Plasma, murine, hypertriglyceridemia in tumor bearing animals, 887
Plasma, rabbit, alpha-tocopherol by GLC, 616
Plasma, rat, alpha-tocopherol by GLC, 616
—— 18:3ω3 deficient, fatty acid comp, 6
—— fatty acid metabolism, eicosatetraynoic acid, 356
—— incorporation of 20:3ω6, 801
—— ketones and dietary triglycerides, 566
—— lipid and neural stimulation, 380
—— lipids, and 1,2-propanediol, 455
Plasma, swine, alpha-tocopherol by GLC, 616
Plasmalogens, choline, ethanolamine, prep enzymatic, 165
Platelets, fatty acid profile and dietary fat, 551
Platelets, human, alpha-tocopherol by GLC, 616
Platelets, rabbit, alpha-tocopherol by GLC, 616
Platelets, rat, alpha-tocopherol by GLC, 616
Platelets, swine, alpha-tocopherol by GLC, 616
Pluronic F68, effect on intestinal absorption of 20:4, 768
Polar lipids, human omental tissue, 317
Polarography, choline oxidase, 540
Polyene antibiotics, membrane perturbation, interaction with sterols, 686
Potatoes, blighted, assay for teratogenicity, 708
Precocene, review, 736
Preen gland, see uropygial gland,
Prenyl pyrophosphates, *Neurospora crassa,* 352
Primate, high density lipoproteins, β-carotene as visual marker, 88
1,2-Propanediol, lipid metabolism, rat, 455
Propranolol, effect on linoleate desaturation, 649
Protein, covalent binding to peroxidized phospholipid, 253
—— deficiency acyl-CoA synthetase, 446
—— deficiency, and 1-^{14}C-acetate incorporation into rat liver, 446
—— deficiency, and fatty acid metabolism, 446
—— deficiency, microsomal fatty acid synthetase, 446
—— dietary, and atherosclerosis, 360
—— separation from lipid, gel filtration, 253
Prostaglandin, production in rat brain, aspirin and/or EFA deficiency, 867
—— synthesis and turnover, human testes, 308
—— synthesis by rat renal medulla papillae, 892
Prostaglandin analog, from linolenic acid, 313
Prostaglandin F, radioimmuno assay, 408
Prostaglandin E_2-9-ketoreductase, presence, cytosol and microsomes, human testes, 308
Prostaglandin metabolism, human testes, whole tissue, microsomes, cytosol, dtmn of, 308
Prostaglandins, content human testes, PGE, PGF, 13, 14 dihydro-15-keto PGF, 308
—— HPLC, 892
—— lipid peroxidation and chemiluminescense, 636
—— production in rabbit, effect of 20:3ω6, 804
—— quantitation, radioimmunoassay, 308
—— synthesis and essential fatty acid deficiency, 408
—— synthesis in rat brain, 408
Prostate, human, dolichol, isolation, quantitation, free and esterified, 291
Protozoa, ciliated, effect of cholesterol on morphology, metabolism, physiology, 692
—— inhibition of pentacyclic triterpenol synthesis by sterols, 692
Pulse-chase, in cultured human skin fibroblasts, 758
Pyrrolidide derivatives, C_{20} unsaturated FA, bovine lens, mass spectra, 190
Pyrrolidides, GC-MS of 21:5ω3, 24

R

Rabbit, atherosclerosis and dietary fiber, 366
—— blood pressure and lysophosphatidic acids, 572
—— hypercholesterolemia, 360
Rabbit adipose, effect of phthalate esters on lipid biosynthesis, 673
Rabbit kidney, prostaglandin production from 20:3ω6, 804
Rabbit liver, effect of phthalate esters on lipid biosynthesis, 673
Rabbit, plasma, alpha-tocopherol by GLC, 616
Rabbit, platelets, alpha-tocopherol by GLC, 616
Rabbit, testes, effect of phthalate esters on lipid biosynthesis, 673
Radial immonudiffusion, quantitation of HDL apo A-I and A-II, 926.
Radioimmunoassay, HDL apo A-I and apo A-II levels in hyperlipidemia, 951
—— lipoprotein apo C-III, apo C-II, 933
—— prostaglandin F, 408
—— quantitation of prostaglandins, 308
Rapeseed oil, cold stress in rats, 459
—— dtmn of erucic acid, comparison of methods, 283
—— dietary, FA comp, phospholipids cardiac mitochondria, effect on, 301
—— FA profile, 2 varieties, 301
—— mass fragmentographic dtmn, erucic acid, 283
—— rat cardiac triglycerides and FFA, 438
—— rat, effect on lipoprotein lipid comp, 121
—— sterols and sterol esters, *B. napus,* 658
Rat, absorption and metabolism of heptadecane, 110
—— absorption of alkyldiacylglycerol stereoisomers, 338
—— absorption of triglyceride isomers, 338
—— bile acids, comp and tissue, distribution of, 42
—— bile acids, dietary fats, cancer, 976
—— blood pressure and lysophosphatidic acids, 572

—— blood pressure, effect of gestation, 167
—— cholesterol, bile acid synthesis, effect of ethanol, 134
—— chyle lipids, 338
—— clofibrate and fatty acid metabolism, 487
—— 18:3ω3 deficiency, 6
—— desaturation of heptadecanoic acid, 110
—— dietary antioxidants and pentane production, 403
—— distribution of plant sterols, 427
—— Encephalomyelitis, 408
—— erucic acid and heart free fatty acids, 438
—— erucic acid and heart triglycerides, 438
—— Fe-deficiency and glucose [U-^{14}C] metabolism, 473
—— gangliosides of cells from mammary carcinoma, 451
—— heptadecanoic acid, incorporation in lipids, 110
—— lipid peroxidation, 403
—— lipogenesis and iron-deficiency, 473
—— liver fatty acid metabolism, eicosatetraynoic acid, 356
—— liver fatty acids, and protein deficiency, 446
—— liver mitochondrial lipid, dietary fat and ethanol, 540
—— oxidation of heptadecane, 110
—— palmitate and erucate metabolism, 487
—— pentane production, 403
—— pentane production in, 396
—— plasma fatty acid metabolism, eicosatetraynoic acid, 356
—— plasma and neural stimulation, 380
—— rapeseed oil feeding, lipoprotein fatty acid profile, 121
—— tissue lipids and 1,2-propanediol, 455
—— vasopressor phospholipid response, 468
Rat, adipose, dietary heptadecane metabolite lipid distribution, 110
—— effect of phthalate esters on lipid biosynthesis, 673
Rat, adrenal, cholesteryl esters, circadian cycle, 181
Rat bile, bile acids, 605
—— effect of exogenous lipids on hydrolysis of PL, 796
—— HPLC, electron impact mass spectrometry, 971
—— PL, sterol, bile acid distribution, effect of cholesterol, 42
Rat bile acids, α and β-muricholic, cholic, lithocholic, deoxycholic, 42
Rat bile duct, cannulation, 791
Rat brain, cholesterol esterification, fatty acid specificity, 777
—— incorporation of 20:3ω6, 801
—— lipid, extraction, comp, effect of storage conditions, 294
—— prostaglandin production, aspirin and/or EFA deficiency, 867
—— prostaglandin synthesis, 408
—— α-tocopherol content, 832
Rat breath, pentane, indication of lipid peroxidation, ethanol fed rats, 305
Rat cerebellum, α-tocopherol content, 832
Rat colipase, protective effect of bile lipoprotein complex, 211
Rat, EFA deficient, adrenal, cholesteryl esters, 181
—— plasma corticosterone, 181
Rat feces, small, rat bile acid distribution, effect of cholesterol, 42
Rat heart, cells in culture, thermally-oxidized fats, 809
—— effect of oxidized oil distillate on weight and FA comp, 49
—— lipid and dietary docosenoic acids, 459
—— lipids and 1,2-propanediol, 455
—— triglycerides, FFA and erucic acid, 438
Rat heart mitochondria, FA comp phospholipids, effect of dietary rapeseed oil, 301
Rat hepatocytes, clofibrate and fatty acid metabolism, 487
—— peroxisomes, 487
Rat, hepatoma, incorporation of octadecenoate isomers, PC and PE, 75
Rat intestine, absorption of biliary lipids, 796
—— arachidonic acid absorption, 768
—— contents, stabalization, pancreatic lipase and colipase, 211
—— site of cholesterol absorption, 99
—— transport of diacylalkylglycerol, 844
Rat kidney, effect of gestation, DNA and protein content, 167
—— effect of gestation on lipid comp, 167
—— effect of oxidized oil distillate on weight and FA comp, 49
—— prostaglandin synthesis, EFA-deficiency, 892
Rat large intestine, bile acid distribution, effect of cholesterol, 42
Rat lipoproteins, isolation, VLDL, LDL, HDL, 121
—— phospholipid, TG, CE fatty acids, control and rapeseed fed, 121
—— profile, effect of phthalate esters, 66
Rat liver, acyl-S-pantetheine, 422
—— bile acid synthesis, effect of ethanol, 134
—— cholesterol content, phthalate esters, 66
—— cholesterol synthesis, effect of ethanol, 134
—— dietary heptadecane metabolite lipid distribution, 110
—— effect of cyclopropene acids, on octadecenoate isomers, of PE, PC, TG, CE, 232
—— effect of oxidized oil distillate on weight and FA comp, 49
—— effect of phthalate esters on lipid biosynthesis, 673
—— eicosatetraynoic acid effect on fatty acid metabolism, 356
—— fatty acids, and protein deficiency, 446
—— hepatoma, effect of diet on PE and PC comp, 75
—— incorporation of 20:3ω6, 801
—— indomethacin and lipid peroxidation, 636
—— lipid and sterols, cholesterol feeding, 588
—— lipid biosynthesis, phthalate esters, 66
—— lipid extraction, 563
—— lipids and arginine deficiency, 563
—— lipids and 1,2-propanediol, 455
—— lipogenesis and iron-deficiency, 473
—— linoleate desaturation activity, β-blocking agents, 649
—— microsomes, cholinephosphotransferase inhibition, 161
—— mitochondrial lipid, dietary fat and ethanol, 540
—— small, rat bile acid distribution, effect of cholesterol, 42
—— weight, phthalate esters, 66
Rat liver golgi, isolation of, 161
Rat liver microsomes, acyl-S-pantetheine, 422
—— acyltransferase, 329
—— isolation of, 161
Rat liver mitochondria, peroxidation assay, 383
Rat pancreatic juice, biliary PL Hydrolysis, 791
Rat pancreatic lipase, protective effect of bile lipoprotein complex, 211
Rat plasma, alpha-tocopherol by GLC, 616
—— eicosatetraynoic acid effect on fatty acid metabolism, 356
—— incorporation of 20:3ω6, 801
—— ketones and dietary triglycerides, 566
—— lipid and neural stimulation, 380
—— lipids and 1,2-propanediol, 455
Rat platelets, alpha-tocopherol by GLC, 616
Rat renal medulla, prostaglandin synthesis, EFA-deficiency, 892
Rat serum, hypercholesterolemia in various cholesterol containing diets, 588
—— lipogenesis and iron-deficiency, 473
—— PL, sterol, bile acid distribution, effect of cholesterol, 42
Rat, small intestine, bile acid distribution, effect of cholesterol, 42
—— cholesterol uptake, kinetics and thermodynamics, 239
Rat spinal cord, α-tocopherol content, 832
Rat testes, effect of phthalate esters on lipid biosynthesis, 673
Rat tissues, phospholipid comp, 18:3ω3 deficiency, 6
Rat villus microsomes, stimulation of glycosyltransferase, in vitro, by LPC, 297
Rauscher murine leukemia virus, erythroblast cholesterol and PL, 580
Red blood cells, see erythrocytes, 137
Regioselectivity, immobilized phospholipase A_2, 840
Renal cortex, rabbit, prostaglandin production, 20:3ω6, 804
Renal medulla, rabbit, prostaglandin production, 20:3ω6, 804
—— rat, effect of gestation, DNA and protein content, 167
—— rat, effect of gestation on lipid comp, 167
Renal medulla, rat, prostaglandin synthesis, EFA-deficiency, 892
Respiration, sterol synthesis in yeast, 730
Reticulum, sarcoplasmic, hydrolysis, phospholipase D, effect on calcium uptake, in vitro, 264
Retina, rat, 18:3ω3 deficient, fatty acid comp, 6
Rhizopus arrhizus, lipase, hydrolysis diacylglycerophospholipids, 165
Rubber, furanoid fatty acid in latex, 905
Ruminants, biohydrogenation of cholesterol, 818

S

Saccharomyces cerevisiae, see also Yeast
Saccharomyces cerevisiae KD-46, KD-115, KD-115PR, Δ4 to Δ15 *cis*-methyleneoctadecenoates, 878
Saccharomyces cerevisiae, sterol, esterification, hydrolysis, in cell free extracts, 29
Safflower oil, hydrogenated, 18:1 isomers in hepatoma PC and PE, 75
Salicylate, see aspirin
Salmon, meat, peroxide value, 147

Sapindaceae, seed oils, cyanolipid dtmn, 514
Sarcoplasmic, reticulum, hydrolysis, phospholisase D, effect on calcium uptake, in vitro, 264
Saturated fatty acids, linoleic acid autoxidation in monolayers, 517
Scorbutic, guinea pig, 116
Sea Urchin eggs, fatty acid comp, fertilized, unfertilized, 827
Seal, harp, 21:5ω3 in blubber, 24
Seal oil, 21:5ω3 in blubber, 24
Seed, Jojoba, developing, fatty acid, elongation and de novo synthesis, 203
—— developing, wax biosynthesis, 203
Sei whale, blubber, TG, FFA, phospholipid, comp, 18
—— comp of PE, PC, TG, 18
—— food chain, 18
—— liver, TG, PC, PE, FFA, comp, 18
—— muscle, TG, phospholipid, comp, 18
—— positional analysis PE, PC, TG, 18
—— stomach contents, TG, phospholipid, FFA, comp, 18
Selenium, pentane production in rat, 396
—— vitamin A, 396
Serum cholesterol, pigeons, hypercholesterolemia, arylsulfonate esters, 644
Serum cholesterol, rabbit, effect of phthlate esters, 673
Serum cholesterol, rat, effect of phthalate esters, 673
Serum lipids, effect of diet, minipigs, 174
Serum lipoproteins, minipig, effect of diet, 174
Serum, pig, cholesterol content, free and total, 225
—— cholesterol esterification, rate of, 225
—— LCAT activity, assay, 225
—— phosphatidylcholine, FA comp and positional distribution, 225
Serum, rat, hypercholesterolemia in various cholesterol containing diets, 588
—— lipogenesis and iron-deficiency, 473
—— PL, sterol, bile acid distribution, effect of cholesterol, 42
—— plant sterols, 427
Sex, rat liver mitochondrial lipids in ethanol ingestion, 540
Sheep, teratogenicity of cyclopamine, 708
Sheep placenta, transfer of free 16:0 and 18:2 across, 610
Sialic acid, rat mammary carcinoma-derived cells, 451
Sialytransferase, activity, rat villus microsomes, effect of LPC and detergents, 297
Simmondsyl acetate, formation in Jojoba seed cotyledons, 203
Sitosterol, distribution in rat, 427
—— rapeseed oil sterols, *B. napus,* 658
—— tobacco and barley sterylglycosides, 697
β-Sitosterol, protected, effect on milk production, 818
Skin, hamster, diester wax, 1,2-alkanediols, branched, 829
Skin, human, polyenoic acid metabolism in cultured fibroblasts, 758
Snake venom, phospholipase A_2, 840
Solasodine, assay for teratogenicity, 708
Solka-Floc, in diet of cholesterol fed rat, 588
Soybean, phospholipids, 497
Soybean extract, catalyst, formation of *trans*-12, 13-epoxy-9-hydroperoxy-*trans*-10-octadecenoic acid, 246
Soybean lecithin, fractionation, 468
Soybean lysophosphatidic acid, blood pressure, 572
Soybeans, lipids and chill resistance, 504
Spectra, electron spin resonance, collagen cross linking lipid peroxidation, 755
Spectra, infra-red, bile acid sulfates, 479
—— cyclopamine, 708
—— furanoid fatty acid in methylester, 905
—— lipid autoxidation products, 415
—— methyl esters, hydroxy FA, methoxy-hydroxy derivatives of epoxy FA, 270
—— methyl esters, Δ5,9,19–28:3; Δ5,9–26:2; Δ17–26:1; marine sponges, 199
—— 24-methylene cholesterol acetate, 34
—— *N. alba* sterol acetate hydrogenated, 34
—— *N. alba* sterol, free and acetate, 34
Spectra, mass, acetylated pentaols from 22,25-dideoxyecdysone, 783
—— C20 acylpyrrolidide, diagnostic fragments, Δ11–20:1, Δ13–20:1, Δ7,13–20:2, Δ8,14–20:2, Δ5,8,11–20:3, Δ5,8,-11,14–20:4, 190
—— anacardic acid and derivatives, 525
—— arachidonic acid pyrrolidide, 190
—— bile acids, 976
—— bile acids, conjugated, electron impact, 971
—— chemical ionization, 22:3ω9, 892
—— choline-N-$^{13}CH_3$-PC, 92
—— cyclic fatty acid, 313
—— cyclopamine, 708
—— derivatives of hydroxysterculic acid, 270
—— dtmn, erucic acid, rapeseed oils, 283
—— dihydroxypalmitates from cutin, 836
—— eicosa-7,13-dienoylpyrrolidine, 190
—— eicosa-5,8,11-trienoylpyrrolidine, 190
—— enantiomorphic monoacyl-*sn*-glycerol carbonates, 557
—— epicoprostanol, identification, rat feces, 217
—— furanoid fatty acid in methylester, 905
—— hydrogenolysis products of a furanoid fatty acid, 905
—— linoleic acid oxidation products, 517
—— lipid autoxidation products, 415
—— lithocholic acid-3α-sulfate metabolites, 152
—— methyl oleate hydroperoxide thermal decomposition products, 511
—— 24-methylene cholesterol acetate, 34
—— 24-methylene cholesterol, TMS, 34
—— *N. alba* sterol, TMS, 34
—— neuroblastoma antioxidant, 391
—— oogoniols from *Achlya,* 716
—— PGB_1 methyl ester-trimethyl silyl ether, 804
—— PGE_2 methyl ester-methoxime-bisacetate, 804
—— phosphatidyldimethanol, 497
—— phospholipid derivative, 468
—— 21:5ω3, pyrrolidide derivative, 24
—— pyrrolidide derivatives, unsaturated FA, bovine lens, 190
—— rapeseed oil sterols, *B. napus,* 658
—— reductive czonolysis products, 575
—— silver nitrate derivatives, methyl ester of cyclopropene FA, 270
—— sterols algal, 533
—— steryl acetates, *N. crassa,* 56
—— steryl acetates, 34
—— *trans*-12,13-epoxy-9-hydroperoxy-*trans*-10-octadecenoic acid, derivatives, 246
—— C_{20} unsaturated FA, bovine lens, 190
Spectra, mass, methyl esters, branched chain, derivatives from waxes of uropygial gland secretions, 274
—— of cyclopropene acids, 270
—— of erucic and 1-^{14}C-erucic acid, 283
—— Δ5,9,19–28:3; Δ5,9–26:2; Δ17–26:1, marine sponge, 199
Spectra, nuclear magnetic resonance, 1,2-alkanediols, branched, 829
—— ^{13}C, cyanolipids, 514
—— cyclopamine, 708
—— ecdysone metabolism in fat body culture, 783
—— furanoid fatty acid, 905
—— HDL, review, 920
—— lipid autoxidation products, 415
—— lysophosphatidic acid, 468
—— methyl-9-hydroxy-*trans*-12,13 epoxy-*trans*-10-octadecenoate, 246
—— methyl *trans*-12,13-epoxy-9-hydroperoxy-*trans*-10-octadecenoate, 246
—— monobromopalmitoyl and palmitoleic acids, 85
—— C_{20}-C_{36} monoenoic methyl esters, 575
—— *N. alba* sterol acetate, free and from sulfate esters, 34
—— oogoniols from *Achlya,* 716
—— sterol acetates, 34
—— TMS derivatives, hydroxy FA, 270
Spectra, ^{13}C-nuclear magnetic resonance, choline-N-$^{13}CH_3$-PC, 92
Spectra, optical rotary dispersion, dihydroxypalmitates from cutin, 836
Spectra, para magnetic resonence, methyl esters, Δ5,9,19–28:3; Δ5,9–26:2; Δ17–26:1, marine sponge, 199
Spectra, proton magnetic resonance, *N. alba* sterol acetate, 34
—— sterol acetates, 34
Spectra, ultraviolet, cyclic fatty acid, 313
—— derivatives methyl esters of cyclopropene and hydroxy FA, 270
—— ecdysone metabolism in fat body culture, 783
—— methyl esters, Δ5,9,19–28:3; Δ5,9,26:2, Δ17–26:1; marine sponge, 199
Spectra, X-ray scattering, HDL, review, 920
Sphingomyelin, bovine optic nerve, PL and fatty acid profile, 679
—— fatty acid profile, 551
—— human omental tissue, 317
—— isolation, beef brains, 267
—— rat brain, content, 294
—— rat, renal medulla, effect of gestation, 167
Sphingosylphosphatidylcholine, prep, from beef brain sphingomyelin, 267
Spinal cord, guinea pig, EAE production in rat, 867
—— α-tocopherol content, 832
Spinal cord, rat, α-tocopherol content, 832
Spleen, human, dolichol, isolation, quantitation, free and esterified, 291
Spleen, mouse, erythroblast lipids in viral infection, 580
Spleen, rat, 18:3ω3 deficiency, phospholipid comp, 6
Sponge, marine, characterization of unsaturated fatty acids, 199
Squalene, GLC, 110

—— hepatic synthesis, effect of phthalate esters, 66
Stearate, ^{14}C incorporation and modification in mouse leukemia cells, 666
Stearic acid, oxidative desaturation, microsomes, mouse liver and hepatoma, 289
Stearoyl-CoA, acylation, of lysophosphatidic acid, 329
Stearoyl-CoA desaturase, liver and adipose, cardiomyopathic hamster, 622
Stearyl-p-toluenesulfonate, hypercholesterolemia in pigeon, 644
Sterculia foetida oil, source of cyclopropene acids, comp, 232
Sterculic acid, content of selected seed oils, GLC anal, 270
—— dietary, effect on octadecenoate isomers, rat liver and hepatoma, 232
—— in *Sterculia foetida* oil, content, 232
Stereoisomers, alkyldiacylglycerol, absorption, rat, 338
Stereoisomers, triglyceride, absorption, rat, 338
Stereospecific analysis, murine erythroblast PL, PE in viral infection, 580
—— partial, sei whale liver PC and PE, 18
—— rat liver PC, PE, 75
—— TG, human omental tissue, 317
Steroids, dietary fiber, 366
Steroids, ecdy- and aza-, effect on molting hormone, cockroach leg regenerate assay system, 259
Sterol esterase, in yeast, 730
Sterol, esterification, effect of stage of growth, pH and buffer on, 29
Sterol methyl transferase, in yeast, 730
Sterol synthesis, mouse fibroblast culture, inhibitors, 704
Sterols, extraction from algal cultures, 533
—— hormone synthesis in the squatic fungi *Achlya,* 716
—— membrane perturbation by polyene macrolide antibiotics, 686
—— metabolism in algal cell cultures, 533
—— mutant algae, 533
—— *N. crassa,* TLC, 56
—— of *Nitzschia alba,* 34
—— output taurodeoxycholate feeding, 605
—— plant, cholesterol absorption, 427
—— plant, rat liver, 427
—— plant, rat serum lipoproteins, 427
—— rat feces, TLC separations, 217
—— synthesis and respiratory competency in yeast, 730
—— that do and do not inhibit tetrahymanol synthesis, 692
Sterols, 24-ethyl, dealkylation by a ciliated protozoan, 692
Sterols, fecal, cholesterol fed rats, 588
—— rat, coprostanol and cholesterol content, effect of diet, 217
Sterols, oxygenated, inhibition of HMB-CoA reductase in cell culture, 704
Sterols, plant, cholesterol synthesis in insects, 742
Sterculic acid, α-hydroxy, seed oil of *P. aquatica,* content, 270
Steryl acetates, IR, GLC-MS, PMR, NMR, 34
Steryl ester, hydrolysis, by yeast extracts, 29
Steryl esters, in rapeseed, *B. napus,* oil, 658
—— yeast subcellular fractions, 730
—— *N. crassa,* 56
Steryl glucosides, in yeast, 730
Sterylglycosides, tobacco and barley, 697
Stress, cold, and docosenoic acids, 459
Sucrose, arteriosclerosis, 370
Superoxide dismutase, indomethacin and lipid peroxidation, 636
Surfactants, effect on intestinal absorption of 20:4, 768
Swine, minipigs atherogenic diets, 174
Swine aorta, palmitic acid incorporation, 873
Swine plasma, alpha-tocopherol by GLC, 616
Swine platelets, alpha-tocopherol by GLC, 616

T

Tangier disease, HDL and atherosclerosis, review, 914
—— high density lipoprotein deficiency, 911
Taurochenodeoxycholic acid, HPLC, electron impact mass spectrometry, 971
Taurochenodeoxycholic acid-3-sulfate, HPLC, 908
Taurocholate, effect on intestinal absorption of 20:4, 768
Taurocholic acid, HPLC, electron impact mass spectrometry, 971
Taurocholic acid-3-sulfate, HPLC, 908
Taurodeoxycholate, micelle formation, effect of amphiphiles, 187
Taurodeoxycholic acid, effect on cholesterol and bile acid metabolism, 605
—— HPLC, electron impact mass spectrometry, 971
Taurodeoxycholic acid-3-sulfate, HPLC, 908
Taurolithocholic acid-3-sulfate, HPLC, 908
Tauromuricholic acids, HPLC, GC-MS, 976
Temporal gland, elephant, FA profile, neutral lipids, 195
Terpenols, *Neurospora crassa,* 352
Terepenyl pyrophosphates, hydrolysis, 352
—— *Neurospora crassa,* 352
Testes, human, dolichol, isolation, quantitation, free and esterified, 291
—— prostaglandin synthesis and turnover, microsomes, 308
Testes, rabbit, effect of phthalate esters on lipid biosynthesis, 673
Testes, rat, 18:3ω3 deficiency, phospholipid comp, 6
—— effect of phthalate esters on lipid biosynthesis, 673
Δ15,18-Tetracosadienoic acid, metabolism and dietary fat, 551
Δ5 Tetracosamonoenoic acid, *M. tuberculosis,* 575
1-Tetradecyl-2,3-dioleoyl-sn-glycerol, absorption in rat, 338
Tetrahymena pyriformis, effect of cholesterol on morphology, metabolism, physiology, 692
—— inhibition of pentacyclic triterpenol synthesis by sterols, 692
Tetrahymanol, inhibition of synthesis by sterols, 692
Thermodynamics, cholesterol uptake, rat small intestine, 239
Thrombosis, arteriosclerosis, 378
Thymus, mouse, lymphoma-bearing, lipid comp, 464
Thyroid, bovine, acid triacylglycerol lipase, 598
Thyroid, human, dolichol, isolation, quantitation, free and esterified, 291
Tobacco hornworm, synthesis of cholesterol from plant sterols, 742
Tobacco seedlings, steryl glycosides, 697
α-Tocopherol, HPLC, 832
—— rat plasma and platelets, GLC, 616
Tomatidine, assay for teratogenicity, 708
Tomato cutin, optical retention of dihydroxypalmitates, 536
Toxicity, ethanol, pentane production, indication of lipid peroxidation, effect of vitamin E, 305
Transesterification, potassium methoxide on celite microcolumns, 835
Transferase, glycosyl, microsomal, stimulation by LPC, steric requirements, 297
Transformed cells, mouse embryo cells, 3T3, SV3T3, PL, FA, 653
Transmethylation, potassium methoxide on celite microcolumns, 835
2,4,6-Tri-t-butyl nitrosobenzene, radical scavenger, 755
Triacylglycerol acylhydrolase, bovine thyroid gland, isolation, 598
Triacylglycerols, FA comp, secretion, four *Ciconiiformes* species, 274
—— hepatic synthesis, effect of phthalate esters, 66
—— rat liver and hepatoma, effect of cyclopropene acids on octadecenoate isomers, 232
—— rat liver and hepatoma, FA comp, effect of cyclopropene acids, 232
n-Tricosane, biosynthesis by cockroach, 323
Trifluperidol, steryl ester synthesis in yeast, 730
Triglyceride, biosynthesis, rat mammary microsomes, 95
—— egg yolk, incorporation of linoleate and linoelaidate, 103
—— Ehrlich ascites carcinoma in mice, 887
—— liver and thymus of lymphoma-bearing mouse, 464
—— plasma, and ethanol ingestion, 433
—— plasma level and HDL, 951
—— rat liver and arginine deficiency, 563
Triglyceride lipase, acid, bovine thyroid, 598
Triglycerides, dietary, and plasma ketones in rat, 566
—— elephant temporal gland, FA comp, 195
—— human omental tissue, 317
—— lipoprotein, fatty acid comp, rapeseed fed rat, 121
—— rat, and 1,2-propanediol, 455
—— rat renal medulla, effect of gestation, 167
—— *Sapindaceae* seed oils, cyanolipids, 514
—— secretion rates in mice, 887
—— serum of iron-deficient rat, 473
—— stereospecific anal, 317
Triglycerides, stereoisomers, absorption, rat, 338
Triolein, volatiles from heated, 511
Triterpenols, pentacyclic, inhibition of synthesis by sterols, 692
Tritiation, of zymosterol, 29
Triton WR-1339, hypertriglyceridemia in mice, 887
Tumor, murine, hypertriglyceridemia, dietary fat, 887
—— incorporation of elaidic acid, 850
Tween 80, effect on intestinal absorption of 20:4, 768

U

Ultracentrifugation, lipoproteins, 951
Ultracentrifugation, density gradient, quantitation of HDL apo A-I and A-II, 926

Ultracentrifugation, gradient, lipoprotein HDL_{2b}, liposomes, 943
—— lipoproteins, 933
Ungnadia speciosa, see Sapindaceae
Urea adduction, termally oxidized fats, 809
Urea complex, fatty acid fractionation, 21:5ω3, 24
Uric acid, inhibition of LCAT activity *in vitro,* 619
Uropygial gland, comp, secretion, four *Ciconiiformes* species, 274
—— lipid extraction, separation and purification, 274
—— secretion, FA and alcohol comp of waxes, four species, 274
Uropygial gland, chicken, lipids, wax diesters, 492

V

Vasopressor phospholipid, identity, 468
Veratrum californicum, teratogenicity of cyclopamine, 708
Villi, rat, microsomes, stimulation of glycosyltransferase, in vitro, by LPC, 297
Virus, Rauscher murine leukemia, erythroblast cholesterol and PL, 580
Vitamin C, deficiency, effect on adrenal cholesteryl esters, 116
Vitamin D_3, 1,25-dihydroxy, interaction with chick intestinal mucosa, 723
Vitamin E adequate and deficient diets, effect on lipid peroxidation of acute ethanol toxicity, 305
—— deficiency, rat, 403
—— pentane production in rat, 396, 403
VLDL, transport of diacylalkylglycerol, 844

W

Wax, Jojoba cotyledon, incorporation of acetate, malonate, glucose, or FA supplements, 203
—— whale jaw, melon, blubber, 860
Wax diesters, chicken uropygial gland, 492
—— hamster skin, 1,2-alkanediols, branched, 829
Waxes, biosynthesis, developing Jojoba seed, 203
—— comp, uropygial gland, four *Ciconiiformes* species, 274
Whale, bacon, peroxide value, 147
Whale blubber, wax esters, TG, ethers, fatty acid, alcohol profile, 860
Whale jaw, wax esters, TG, ethers, fatty acid, alcohol profile, 860
Whale melon, wax esters, TG, ethers, fatty acid, alcohol profile, 860
White carneau pigeon, effect of arylsulfonate esters on hypercholesterolemia, 644

X

Xanthine, inhibition of LCAT activity *in vitro,* 619
Xanthine oxidase, indomethacin and lipid peroxidation, 636
Xestospongia halichondroides, see sponge, marine, 199
X-ray diffraction, models for cholesterol-phospholipid bilayers, 594

Y

Yeast, cell production with Δ^4 to Δ^{15}*cis*-methylene octadecenoates, 878
—— sterol and steryl ester synthesis, 730
Yeast mutants, defective sterol synthesis, 730
Yeast sterols, isolation from cell free extracts, 29

Z

Zymosterol, in yeast, 29
Zymosterol oleate, formation by yeast, 29